

WL-TR-94-3089

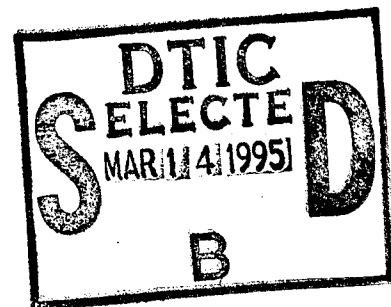


**COMPUTATIONAL FLUID DYNAMICS (CFD) ANALYSIS OF A C-135 AIRCRAFT  
WITH A SIDE-MOUNTED SPLITTER PLATE (with comparison to wind tunnel data)**

**Howard T. Emsley  
Interdisciplinary and Applied Computational Fluid Dynamics Group  
Computational Fluid Dynamics Research Branch  
Aeromechanics Division**

**June 1994**

**Final Report for Period March 1993 - June 1993**



**Approved for public release; distribution is unlimited.**

19950310 119

**FLIGHT DYNAMICS DIRECTORATE  
WRIGHT LABORATORY  
AIR FORCE MATERIEL COMMAND  
WRIGHT-PATTERSON AIR FORCE BASE, OHIO 45433-7652**

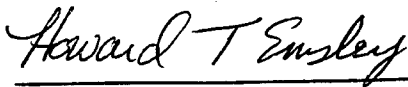
DEFO QUALITY ASSURANCE 1

# NOTICE

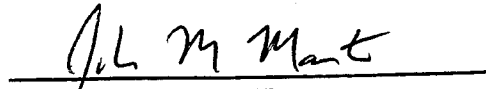
When Government drawings, specifications, or other data are used for any purpose other than in connection with a definitely Government-related procurement, the United States Government incurs no responsibility or any obligation whatsoever. The fact that the government may have formulated or in any way supplied the said drawings, specifications, or other data, is not to be regarded by implication, or otherwise in any manner construed, as licensing the holder, or any other person or corporation; or as conveying any rights or permission to manufacture, use, or sell any patented invention that may in any way be related thereto.

This report is releasable to the National Technical Information Service (NTIS). At NTIS, it will be available to the general public, including foreign nations.

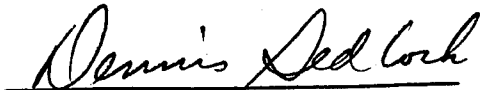
This technical report has been reviewed and is approved for publication.



HOWARD T. EMSLEY  
Project Engineer  
CFD Research Branch



JOSEPH M. MANTER  
Chief  
CFD Research Branch



DENNIS SEDLOCK  
Acting Chief  
Aeromechanics Division

If your address has changed, if you wish to be removed from our mailing list, or if the addressee is no longer employed by your organization please notify WL/FIMC, WPAFB, OH 45433-7562 to help us maintain a current mailing list.

Copies of this report should not be returned unless return is required by security considerations, contractual obligations, or notice on a specific document.

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
<small>Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.</small>				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE 27 June 94	3. REPORT TYPE AND DATES COVERED Final Report Mar 93 - Jun 93	
4. TITLE AND SUBTITLE Computational Fluid Dynamics (CFD) Analysis of a C-135 Aircraft with a Side-Mounted Splitter Plate (with comparison to wind tunnel data)			5. FUNDING NUMBERS PE: 62201F PR: 2404 TA: 10 WU: A1	
6. AUTHOR(S)  Howard T. Emsley (513-255-4522)				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Flight Dynamics Directorate Wright Laboratory (WL/FIMC) Air Force Materiel Command Wright-Patterson AFB OH 45433-7562			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) Flight Dynamics Directorate Wright Laboratory (WL/FIMC) Air Force Materiel Command Wright-Patterson AFB OH 45433-7562			10. SPONSORING / MONITORING AGENCY REPORT NUMBER  WL-TR-94-3089	
11. SUPPLEMENTARY NOTES  Support effort performed for 4950 Test Wing and Airborne Laser SPO				
12a. DISTRIBUTION / AVAILABILITY STATEMENT  Approved for public release; distribution is unlimited			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words)  A Computational Fluid Dynamics (CFD) analysis was performed on a C-135 aircraft with a side-mounted splitter plate at the request of the Airborne Laser SPO at Kirtland AFB, and the 4950 Test Wing at Wright-Patterson AFB. The data collected from the analysis was provided to the Test Wing to augment wind tunnel tests and to provide loading and stability information on the modified aircraft. This work was a precursor to a planned flight test program in which a splitter plate will be tested on a Test Wing aircraft. Four flight conditions were analyzed with a modified and unmodified C-135 aerodynamic model, and incremental stability and aerodynamic derivatives were determined. Additionally, pressure coefficient data were tabulated for use in a structural analysis by the Test Wing.				
14. SUBJECT TERMS Euler Methods Computational Fluid Dynamics			15. NUMBER OF PAGES 102	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UL	

# Contents

<b>List of Figures</b> . . . . .	vii
<b>List of Tables</b> . . . . .	viii
<b>Foreword</b> . . . . .	ix
<b>Acknowledgements</b> . . . . .	x
<b>Nomenclature</b> . . . . .	xi
<b>1 Introduction</b> . . . . .	1
<b>2 Geometric Issues</b> . . . . .	4
<b>3 Grid Generation</b> . . . . .	7
<b>4 Flow Solver</b> . . . . .	8
<b>5 Flow Conditions and Computation Time</b> . . . . .	9
<b>6 CFD Results</b> . . . . .	11
6.1 Tables of Coefficients . . . . .	11
6.2 Particle Trace Plots for Clean Aircraft . . . . .	15
6.3 Particle Trace Plots for Dirty Aircraft . . . . .	21
6.4 Mach Number Contour Plot on the Dirty Aircraft . . . . .	26
6.4.1 Mach=0.87, Alpha=5.5 deg, Beta=-4.1 deg . . . . .	26
6.4.2 Mach=0.87, Alpha=1.4 deg, Beta=-4.1 deg . . . . .	29
6.4.3 Mach=0.36, Alpha=14.6 deg, Beta=-14.5 deg . . . . .	33



6.4.4	Mach=0.76, Alpha=3.0 deg, Beta=0.0 deg . . . . .	37
6.5	Pressure Coefficient Contour Plots on the Plate/Pylon . . . . .	41
6.6	PLOT3D Solution Files . . . . .	46
6.7	Tabulated Cp Data on the Plate/Pylon . . . . .	46
6.8	Cp Contour Plots on Symmetry Plane . . . . .	46
6.9	Fuselage X-station Plots . . . . .	49
6.10	Plate X-station Plots . . . . .	54
6.11	Particle Trace Plot . . . . .	57
<b>7</b>	<b>CFD Results Summary . . . . .</b>	<b>59</b>
<b>8</b>	<b>Tunnel Test Comparison . . . . .</b>	<b>61</b>
<b>9</b>	<b>Plate and Pylon Loading . . . . .</b>	<b>64</b>
<b>10</b>	<b>References . . . . .</b>	<b>69</b>
<b>Appendix</b>	<b>. . . . .</b>	<b>70</b>

Accession For	
WTIS GRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	

## List of Figures

1	Splitter Plate and Pylon . . . . .	1
2	Splitter Plate and Pylon Dimensions . . . . .	5
3	Coordinate System Orientation . . . . .	6
4	C-135 with Velocity Vectors on Surface (Windward Side) . . . . . ( <i>Mach</i> =0.95, <i>Alpha</i> =5.5 deg, <i>Beta</i> =4.1 deg)	16
5	C-135 with Velocity Vectors on Surface (Leeward Side) . . . . . ( <i>Mach</i> =0.95, <i>Alpha</i> =1.4 deg, <i>Beta</i> =-4.1 deg)	17
6	C-135 with Velocity Vectors on Surface (Leeward Side) . . . . . ( <i>Mach</i> =0.87, <i>Alpha</i> =1.4 deg, <i>Beta</i> =-4.1 deg)	18
7	C-135 with Velocity Vectors on Surface (Leeward Side) . . . . . ( <i>Mach</i> =0.36, <i>Alpha</i> =14.6 deg, <i>Beta</i> =14.5 deg)	19
8	C-135 with Velocity Vectors on Surface . . . . . ( <i>Mach</i> =0.76, <i>Alpha</i> =3.0 deg, <i>Beta</i> =0.0 deg)	20
9	C-135 with Splitter Plate (Particle Traces) . . . . . ( <i>Mach</i> =0.87, <i>Alpha</i> =5.5 deg, <i>Beta</i> =-4.1 deg)	22
10	C-135 with Splitter Plate (Particle Traces) . . . . . ( <i>Mach</i> =0.87, <i>Alpha</i> =1.4 deg, <i>Beta</i> =-4.1 deg)	23
11	C-135 with Splitter Plate (Particle Traces) . . . . . ( <i>Mach</i> =0.36, <i>Alpha</i> =14.6 deg, <i>Beta</i> =-14.5 deg)	24
12	C-135 with Splitter Plate (Particle Traces) . . . . . ( <i>Mach</i> =0.76, <i>Alpha</i> =3.0 deg, <i>Beta</i> =0.0 deg)	25
13	Dirty C-135 (Mach Contours) . . . . . ( <i>Mach</i> =0.87, <i>Alpha</i> =5.5 deg, <i>Beta</i> =-4.1 deg)	27
14	Dirty C-135 (Mach Contours, top view) . . . . . ( <i>Mach</i> =0.87, <i>Alpha</i> =5.5 deg, <i>Beta</i> =-4.1 deg)	28
15	Clean C-135 (Mach Contours, top view) . . . . . ( <i>Mach</i> =0.87, <i>Alpha</i> =1.4 deg, <i>Beta</i> =-4.1 deg)	30
16	Dirty C-135 (Mach Contours, top view) . . . . . ( <i>Mach</i> =0.87, <i>Alpha</i> =1.4 deg, <i>Beta</i> =-4.1 deg)	31

17	Dirty C-135 (Mach Contours) . . . . .	32
	( <i>Mach=0.87, Alpha=1.4 deg, Beta=-4.1 deg</i> )	
18	Clean C-135 (Mach Contours, top view) . . . . .	34
	( <i>Mach=0.36, Alpha=14.6 deg, Beta=-14.5 deg</i> )	
19	Dirty C-135 (Mach Contours, top view) . . . . .	35
	( <i>Mach=0.36, Alpha=14.6 deg, Beta=-14.5 deg</i> )	
20	Dirty C-135 (Mach Contours) . . . . .	36
	( <i>Mach=0.36, Alpha=14.6 deg, Beta=-14.5 deg</i> )	
21	Clean C-135 (Mach Contours, top view) . . . . .	38
	( <i>Mach=0.76, Alpha=3.0 deg, Beta=0.0 deg</i> )	
22	Dirty C-135 (Mach Contours, top view) . . . . .	39
	( <i>Mach=0.76, Alpha=3.0 deg, Beta=0.0 deg</i> )	
23	Dirty C-135 (Mach Contours) . . . . .	40
	( <i>Mach=0.76, Alpha=3.0 deg, Beta=0.0 deg</i> )	
24	Splitter Plate and Pylon View Orientation . . . . .	41
25	Splitter Plate and Pylon (Cp Contours) . . . . .	43
	( <i>Mach=0.87, Alpha=5.5 deg, Beta=-4.1 deg</i> )	
26	Splitter Plate and Pylon (Cp Contours) . . . . .	44
	( <i>Mach=0.36, Alpha=14.6 deg, Beta=-14.5 deg</i> )	
27	Splitter Plate and Pylon (Cp Contours) . . . . .	45
	( <i>Mach=0.76, Alpha=3.0 deg, Beta=0.0 deg</i> )	
28	Cp on Symmetry Plane ( <i>Mach=0.76, Alpha=3.0 deg, Beta=0.0 deg</i> ) . . . . .	47
29	Cp on Symmetry Plane ( <i>Mach=0.76, Alpha=3.0 deg, Beta=0.0 deg</i> ) . . . . .	48
30	Cp vs. X-station (fuselage top centerline) . . . . .	50
	( <i>Mach=0.76, Alpha=3.0 deg, Beta=0.0 deg</i> )	
31	Cp vs. X-station (fuselage bottom centerline) . . . . .	51
	( <i>Mach=0.76, Alpha=3.0 deg, Beta=0.0 deg</i> )	
32	Mach Number vs. X-station (fuselage top centerline) . . . . .	52
	( <i>Mach=0.76, Alpha=3.0 deg, Beta=0.0 deg</i> )	
33	Mach Number vs. X-station (fuselage bottom centerline) . . . . .	53
	( <i>Mach=0.76, Alpha=3.0 deg, Beta=0.0 deg</i> )	
34	Cp vs. X-station (plate top centerline) . . . . .	55
	( <i>Mach=0.76, Alpha=3.0 deg, Beta=0.0 deg</i> )	

35	Mach Number vs. X-station (plate top centerline) . . . . .	56
	( <i>Mach=0.76, Alpha=3.0 deg, Beta=0.0 deg</i> )	
36	Streamlines under Aircraft Nose . . . . .	58
	( <i>Mach=0.76, Alpha=3.0 deg, Beta=0.0 deg</i> )	
37	Tufted Splitter Plate in Tunnel . . . . .	62
38	Splitter Plate Oil Flow in Tunnel ( <i>Mach=0.7, Alpha=2.5 deg</i> ) . . . . .	63
39	CFD Oil Flow on Splitter Plate . . . . .	63

## List of Tables

1	Flight Conditions . . . . .	2
2	Clean Case Test Conditions . . . . .	9
3	Dirty Case Test Conditions . . . . .	10
4	Coefficients for the Clean C-135 . . . . .	12
5	Coefficients for the C-135 with Splitter Plate and Pylon . . . . .	13
6	Incremental Coefficient Changes . . . . .	14
7	Test Condition Summary . . . . .	64
8	Pressures and Moments for Condition 1 . . . . .	65
9	Pressures and Moments for Condition 2 . . . . .	66
10	Pressures and Moments for Condition 3 . . . . .	67
11	Pressures and Moments for Condition 4 . . . . .	68

## **Foreword**

The subject analysis was performed by Mr Howard Emsley and Mr Ken Wurtzler of the Flight Dynamics Directorate, Wright Laboratory (WL/FIMC) at the request of the Airborne Laser (ABL) SPO at Phillips Lab, Kirtland AFB. Capt John Wissler of the ABL SPO served as the directing authority for this support effort and Dr James Van Kuren provided direction as the resident consultant for the ABL SPO. This analysis was performed to support a planned ABL flight test in which a large splitter plate configuration will be mounted on the side of a C-135 aircraft.

## **Acknowledgements**

This work was performed with the cooperation of personnel from the Airborne Laser (ABL) SPO at Kirtland AFB, the 4950TW at Wright-Patterson AFB, and Dr James Van Kuren who is serving as an ABL SPO consultant. A special thanks goes to members of Wright Laboratory (WL/FIMC) for their code developing efforts which provided the tools necessary to perform this analysis.

All wind tunnel data used in this report comes from tests conducted at the Trisonic Gasdynamics Facility, Wright Laboratory (WL/FIME) in April 1993. This data was made available by Dr Van Kuren, for comparison with the numerical results.

## Nomenclature

Alpha	<i>Angle of Attack</i>
AOA	<i>Angle of Attack</i>
Beta	<i>Sideslip Angle</i>
CD	<i>Coefficient of Drag</i>
CFD	<i>Computational Fluid Dynamics</i>
CL	<i>Coefficient of Lift</i>
CMpitch	<i>Pitching Moment Coefficient</i>
CMyaw	<i>Yawing Moment Coefficient</i>
CMroll	<i>Rolling Moment Coefficient</i>
Cp	<i>Coefficient of Pressure</i>
CPU	<i>Central Processing Unit</i>
CY	<i>Coefficient of Yaw</i>
deg	<i>Degrees (angular)</i>
FIMC	<i>Computational Fluid Dynamics Branch, Aeromechanics Division, Flight Dynamics Directorate</i>
KEAS	<i>Knots Equivalent Air Speed</i>
mxx	<i>Moment about the X-Axis</i>
myy	<i>Moment about the Y-Axis</i>
mzz	<i>Moment about the Z-Axis</i>
px	<i>Pressure in the X Direction</i>
py	<i>Pressure in the Y Direction</i>
pz	<i>Pressure in the Z Direction</i>
q	<i>Dynamic Pressure</i>
Ve	<i>Velocity</i>
WL	<i>Wright Laboratory</i>



## 1. Introduction

The splitter plate/optical window configuration (see Figure 1) was designed to provide an environment where optical testing can be performed without the interference of the turbulent boundary layer created by the aircraft's fuselage. The pylon, which is mounted on the side of the aircraft, places the splitter plate at least 12 inches away from the fuselage and outside the fuselage boundary layer. By mounting the splitter plate in this fashion, the optical testing will only have to contend with a regenerated thin boundary layer that starts at the front of the plate.

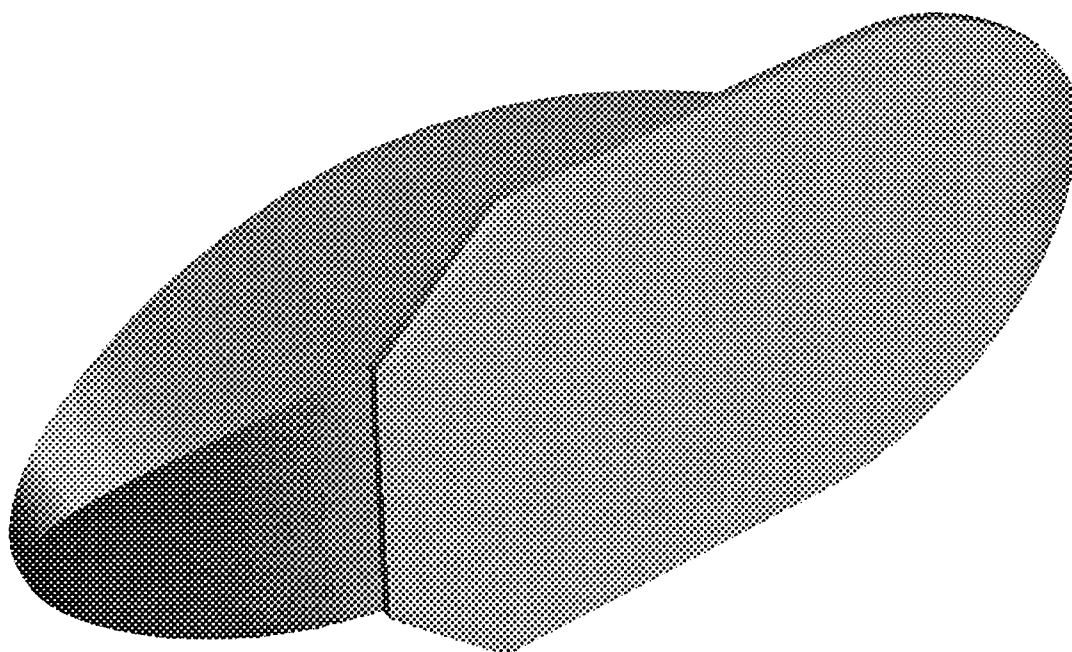


Figure 1: Splitter Plate and Pylon

Concern over the flight characteristics of the modified aircraft as well as concerns about structural loading prompted wind tunnel and Computational Fluid Dynamics (CFD) work to be performed by WL/FIME and WL/FIMC respectively. Structural analysis of the configuration is being performed by the 4950TW/AMDA with pressure data provided by the CFD analysis.

Some results from the wind tunnel testing will be presented in this report, however, complete results are found in Reference 1. For results from the structural analysis, the reader is directed to Mr Kelly Kennedy, 4950TW/AMDA.

The splitter plate/pylon design, geometric measurements of the splitter plate, and its mounting location on the aircraft were provided to WL/FIMC by Dr Jim Van Kuren and Capt Wissler. The test conditions for the CFD analysis (see Table 1) were provided to WL/FIMC by Mr C. E. Cook of 4950TW/AMDA on 1 March 1993 and were confirmed by the ABL SPO in early March.

Table 1: Flight Conditions

Test Pt.	Altitude (feet)	Airspeed (KEAS)	Mach No.	AOA (deg)	Sideslip (deg)	CL**
1	23,800	393	0.95	1.4	4.1	0.21
2	23,800	393	0.95	5.5	4.1	0.525
3	0	240	0.36	14.6	14.5	1.16
4	45,000	189	0.76	3.0	0.0	0.58

\*\*Note: the CL values provided in this table are for a complete C-135 in trim. The analyses performed do not include nacelle/pylon contributions and do not include the effects of rudder, elevator, or flap deflections.

It was explained to WL/FIMC that concern over changes in the flight characteristics of the modified aircraft was the main reason a CFD analysis was requested. Therefore, it was proposed that the total aircraft be modeled (with and without the splitter plate) and analyzed at the four test

points. By proceeding in this fashion, incremental effects of adding the plate/pylon configuration could be determined. For this report the C-135 aircraft without the splitter plate is called the "clean" configuration, and the C-135 aircraft with the plate and pylon mounted on the right side of the fuselage is called the "dirty" configuration.

## 2. Geometric Issues

From previous work for the 4950TW, WL/FIMC had a suitable model of a C-135 wing/body/tail configuration without engine pylons and nacelles. For the dirty case, the plate/pylon geometry was created with a local CAD/CAM system and added to the existing C-135 geometry. A small support strut which is located under the front of the plate for structural strength was omitted from this analysis due to the increased geometric complications that it would introduce and the minor aerodynamic effects it would produce.

For the dirty configuration, the plate/pylon (location provided by Capt John Wissler) was added to the geometry with the front of the elliptical pylon located at fuselage station 405.35 inches. Based on the provided dimensions, the center of the test window is located at fuselage station 460 inches (see Figure 2). The location of the plate/pylon was driven by aircraft modification limitations.

For this analysis, the pylon was placed with zero angle of attack relative to the fuselage of the aircraft. The minimum distance between the plate and the fuselage was specified as 12 inches by Dr Van Kuren and occurs between the lower half of the plate and the fuselage approximately one quarter of the distance aft from the front of the pylon. The very front of the plate which is dipped towards the fuselage is just under 13 inches away from the fuselage.

For the calculation of the coefficients, the following reference areas, moment reference lengths, and moment reference points were provided by the 4950TW/AMDA:

Wing Reference Area = 700700 sq in

Moment	x = 1570.00 in	Moment	x = 846.64 in
Reference	y = 241.88 in	Reference	y = 0.00 in
Lengths	z = 1570.00 in	Point	z = 200.00 in

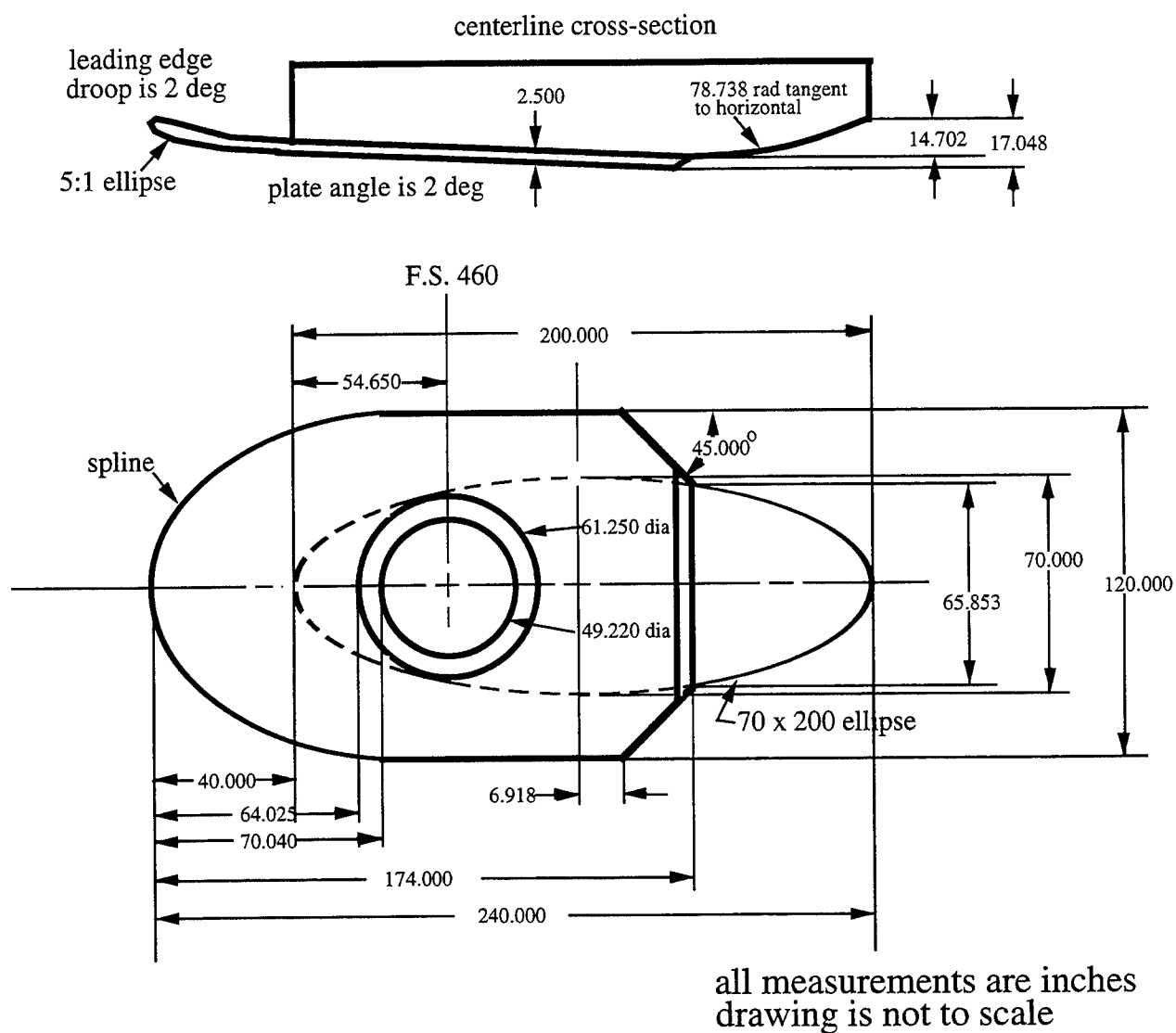


Figure 2: Splitter Plate and Pylon Dimensions

The coordinate system orientation and the positive moment directions are shown below in the figure below.

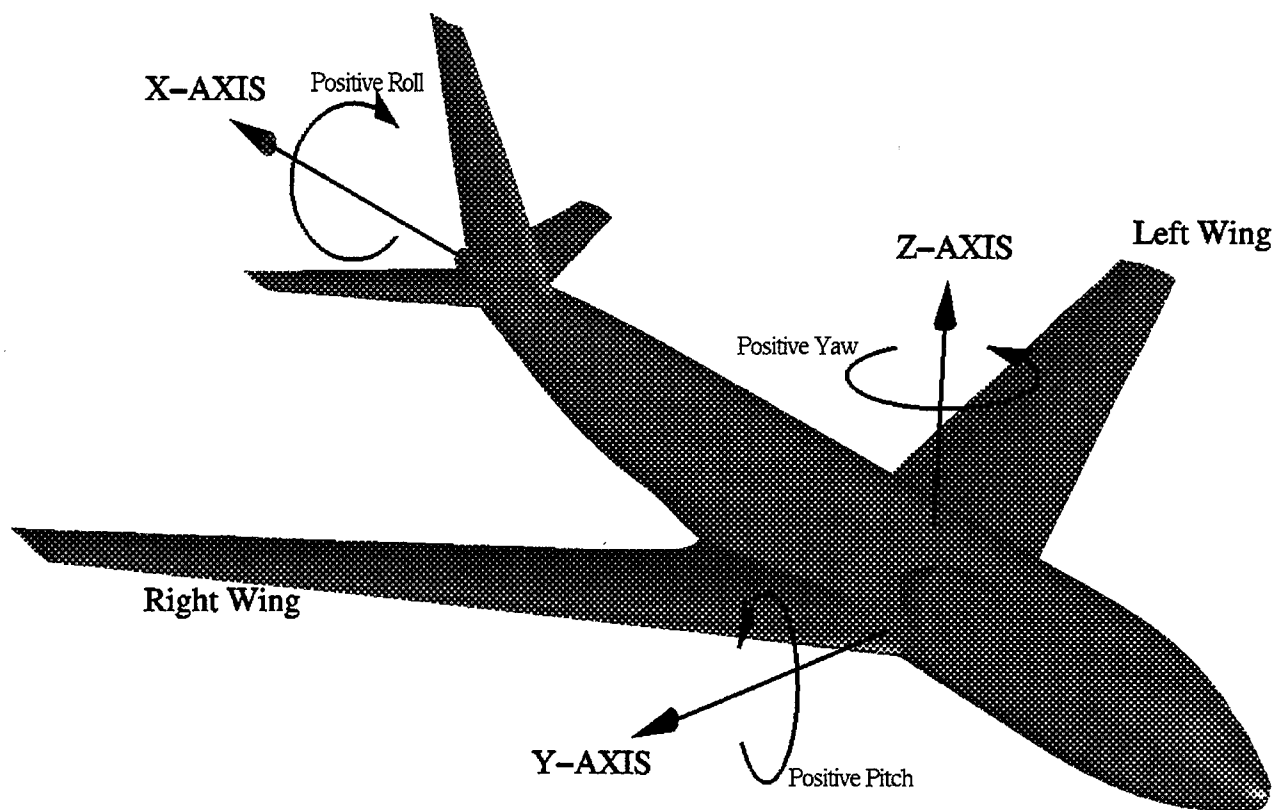


Figure 3: Coordinate System Orientation

### **3. Grid Generation**

With the use of in-house grid generation tools (I3G/VIRGO and PLUTO) [2,3], separate computational grids were generated for each configuration (clean and dirty). The grid for the clean configuration consisted of 22 computational blocks with a total of 1,366,720 grid points and the dirty configuration consisted of 33 computational blocks with a total of 1,379,250 grid points. Differences in the size and the number of blocks in each grid is a direct result of geometric complications added by the plate and pylon.

## 4. Flow Solver

The flow solver used for this analysis, MERCURY, is an in-house Euler code that was developed by Mr William Strang of WL/FIMC [4]. Over the past six years, this code has proven to be very fast, robust, and accurate in calculating flows like those occurring in this analysis. MERCURY is an inviscid flow solver and therefore cannot model the boundary layer that is a concern for this program. It can, however, provide conservative loading information, capture shocks that may occur, and indicate the paths of particles and vortices. This is not a claim that an inviscid solver provides exact measurements in highly viscous regions. Yet, from past experience this solver has produced load information that has proven to be conservative in regions where viscous flows exist. With this in mind, the flight conditions provided for test point #3 contain an extreme beta condition that can produce significant separation on the leeward side of the aircraft. The results in this case should be viewed qualitatively, especially for the dirty configuration where significant separation is expected to occur on the outboard side of the plate. For additional information on the code specifics, the reader is directed to AFWAL-TM-88- 217, "MERCURY User's Manual."

Viscous solvers, such as the TEAM and GASP codes, were considered for this problem, but the time constraints and the computational resources available did not allow an analysis of this magnitude.



## 5. Flow Conditions and Computation Time

For this report, a total of nine flow solution "cases" (five clean cases and four dirty cases) have been run. The Kirtland Cray II was used to calculate the solutions with each case requiring approximately 35 MW of internal memory. On average, 6000 iterations per solution were needed to reach acceptable levels of solution convergence (density residual reduced by 4 orders of magnitude). Each clean case took 28 seconds per iteration while each dirty case took 29 seconds/iteration. This translates into 168,000 seconds per solution (46.67 CPU hours) for each clean case and 174,000 seconds per solution (48.33 CPU hours) for each dirty case. The flow conditions for each case are based on the conditions provided by the 4950TW with several modifications. For the clean cases the actual conditions used are found in Table 2, and for the dirty cases the conditions used are found in Table 3.

Table 2: Clean Case Test Conditions

Mach Number	Angle of Attack (Alpha)	Sideslip Angle (Beta)
0.95	5.5 deg	-4.1 deg
0.95	1.4 deg	-4.1 deg
0.87	1.4 deg	-4.1 deg
0.36	14.6 deg	-14.5 deg
0.76	3.0 deg	0.0 deg

Table 3: Dirty Case Test Conditions

Mach Number	Angle of Attack (Alpha)	Sideslip Angle (Beta)
0.95	5.5 deg	-4.1 deg
0.87	1.4 deg	-4.1 deg
0.36	14.6 deg	-14.5 deg
0.76	3.0 deg	0.0 deg

A negative sideslip angle was used as a direct result of the beta of most concern to the 4950TW. For the clean configuration, the direction the aircraft is sideslipped is not critical due to the symmetry of the aircraft, but for the dirty configuration this direction is crucial.

In the MERCURY flow solver, a negative beta implies that the nose of the aircraft yaws to the right (see Figure 3). Therefore, the decision to use negative beta conditions places the plate on the leeward side of the aircraft in yawed cases. This decision was made due to loading and aerodynamic concerns which were expected to be more significant than those for positive beta conditions. By changing signs of the results for the clean cases, it is possible to use the values for direct comparison with the dirty cases.

In addition to the change of beta, a change in Mach number from 0.95 to 0.87 was made for the dirty cases and led to an additional run of a clean case for direct comparison. This decision was made to add a flight condition clearly within the envelope as compared to those on the margin. With the plate and pylon mounted on the aircraft, it is unlikely that the aircraft will be flown at the outer limits of its Mach envelope. This change was made with the concurrence of Capt Wissler.

## 6. CFD Results

Results from this analysis are presented in a variety of forms in the following sections.

### 6.1 Tables of Coefficients

Coefficients of Lift (CL), Drag (CD), Yaw (CY), as well as Moment Coefficients for Pitch (CMpitch), Yaw (CMyaw), and Roll (CMroll) were created for the clean and dirty solutions (Tables 4 and 5). In addition, incremental coefficient changes (Table 6) were calculated for the three cases where a direct comparison of flow conditions was possible.

The tabulated results show that the presence of the plate/pylon reduces the CL for moderate angles of attack. Although the pylon produces some lift, its influence on the right wing creates a net loss. In turn, the reduced lift on the right wing of the aircraft and the increased lift on the pylon appears to add to the nose up pitching moment and increases the negative rolling moment. In addition, the changed flow on the right wing leads to an increased positive yawing moment. By changing the downwash from the right wing, the airflow on the right side of the vertical tail is accelerated and produces additional yaw.

Results from the Mach 0.36 case illustrate a more complex flow field, and should be viewed in a qualitative manner. The severe angles of attack and sideslip produce massive separation on the left wing and the right side of the vertical tail and produces a wake off of the plate which follows the trailing edge of the wing (see Figure 11). The tabulated data shows a small increase in CL while CD increases significantly. It is important to remember that optical data will not be taken at this flight condition. Therefore, interest in this condition is purely for control and structural purposes.

Table 4: Coefficients for the Clean C-135

MACH	ALPHA	BETA	CL	CD	CY	CMpitch	CMyaw	CMroll	AXIS
	(deg)	(deg)							
0.95	5.5	-4.1	0.4723	0.09357	0.02082	-0.25269	0.008940	0.020049	W
			0.4723	0.09184	0.02746	-0.25348	0.008940	0.001931	S
			0.4790	0.04615	0.02746	-0.25348	0.008714	0.002779	B
0.95	1.4	-4.1	0.2831	0.04953	0.02575	-0.17381	0.009773	-0.016108	W
			0.2831	0.04757	0.02922	-0.17451	0.009773	-0.003639	S
			0.2841	0.04064	0.02922	-0.17451	0.009681	-0.003877	B
0.87	1.4	-4.1	0.3168	0.03357	0.03083	-0.10977	0.011409	-0.016773	W
			0.3168	0.03128	0.03315	-0.11069	0.011409	-0.008882	S
			0.3175	0.02353	0.03315	-0.11069	0.011189	-0.009158	B
0.36	14.6	-14.5	0.5239	0.12461	0.01152	-0.20866	0.010332	0.071486	W
			0.5239	0.11776	0.04236	-0.21991	0.010332	0.016965	S
			0.5366	-0.01810	0.04236	-0.21991	0.005722	0.019022	B
0.76	3.0	0.0	0.3486	0.02182	0.00000	-0.10001	0.000000	0.000000	W
			0.3486	0.02182	0.00000	-0.10001	0.000000	0.000000	S
			0.3492	0.00355	0.00000	-0.10001	0.000000	0.000000	B

(Axis Systems: W = Wind, S = Stability, B = Body)

NOTE: For this analysis, a negative beta indicates the nose sideslips toward the right wing.

Table 5: Coefficients for the C-135 with Splitter Plate and Pylon

MACH	ALPHA	BETA	CL	CD	CY	CMpitch	CMyaw	CMroll	AXIS
	(deg)	(deg)							
0.87	5.5	-4.1	0.4856	0.07605	0.03039	-0.14908	0.014029	-0.020329	W
			0.4856	0.07368	0.03575	-0.15015	0.014029	-0.009618	S
			0.4904	0.02680	0.03575	-0.15015	0.013042	-0.010919	B
0.87	1.4	-4.1	0.3071	0.03356	0.03214	-0.10517	0.012059	-0.016904	W
			0.3071	0.03118	0.03446	-0.10611	0.012059	-0.009341	S
			0.3078	0.02367	0.03446	-0.10611	0.011827	-0.009633	B
0.36	14.6	-14.5	0.5246	0.13415	0.04090	-0.21835	0.024171	-0.072048	W
			0.5246	0.11964	0.07318	-0.22944	0.024171	-0.015082	S
			0.5378	-0.01647	0.07318	-0.22944	0.019588	-0.020688	B
0.76	3.0	0.0	0.3377	0.02318	0.00207	-0.08511	0.002170	-0.001423	W
			0.3377	0.02318	0.00207	-0.08511	0.002170	-0.001423	S
			0.3384	0.00548	0.00207	-0.08511	0.002093	-0.001534	B

(Axis Systems: W = Wind, S = Stability, B = Body)

NOTE: For this analysis, a negative beta indicates the nose sideslips toward the right wing. The plate is on the leeward side of the aircraft for all dirty cases.

Table 6: Incremental Coefficient Changes

INCREMENTAL COEFFICIENT CHANGES BETWEEN CLEAN AND DIRTY CONFIGURATIONS  
DIRTY RESULTS MINUS CLEAN RESULTS (WIND-AXIS ONLY)

			(delta)	(delta)	(delta)	(delta)	(delta)	(delta)
MACH	ALPHA	BETA	CL	CD	CY	CMpitch	CMyaw	CMroll
	(deg)	(deg)						
0.87	1.4	-4.1	-0.0097	-0.00001	0.00131	0.00460	0.000650	-0.000131
0.36	14.6	-14.5	0.0007	0.00954	0.02938	-0.00969	0.013839	-0.000562
0.76	3.0	0.0	-0.0109	0.00136	0.00207	0.01490	0.002170	-0.001423

## 6.2 Particle Trace Plots for Clean Aircraft

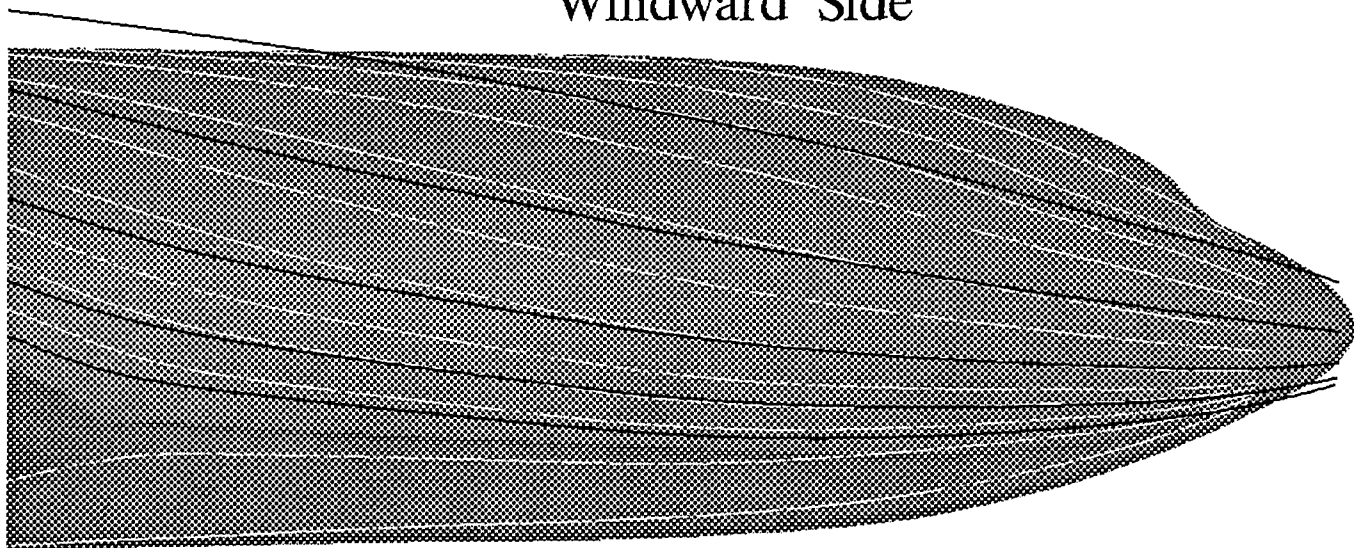
The particle trace plots for the clean cases are shown in Figures 4 - 8. The plots are provided to illustrate the angle of the air flow for a cross-section of the cases run.

The particle traces on the clean configuration shown in the following figures are plotted on and off the fuselage surface. The white streamlines are on the surface and the black streamlines are started approximately 1 foot off the surface (roughly the height of the pylon).

The plots show that the flow angularity is greater on the surface than off the surface in all cases. In general, the flow angle is approximately equal to the angle of attack ( $\alpha$ ) in the region where the plate will be attached, but it increases significantly as the flow approaches the wing.

These plots are only a sampling of the plots that were viewed by the investigators. The additional plots viewed were consistent with the trends demonstrated in those selected.

Windward Side



White Streamlines: on surface  
Black Streamlines: above surface

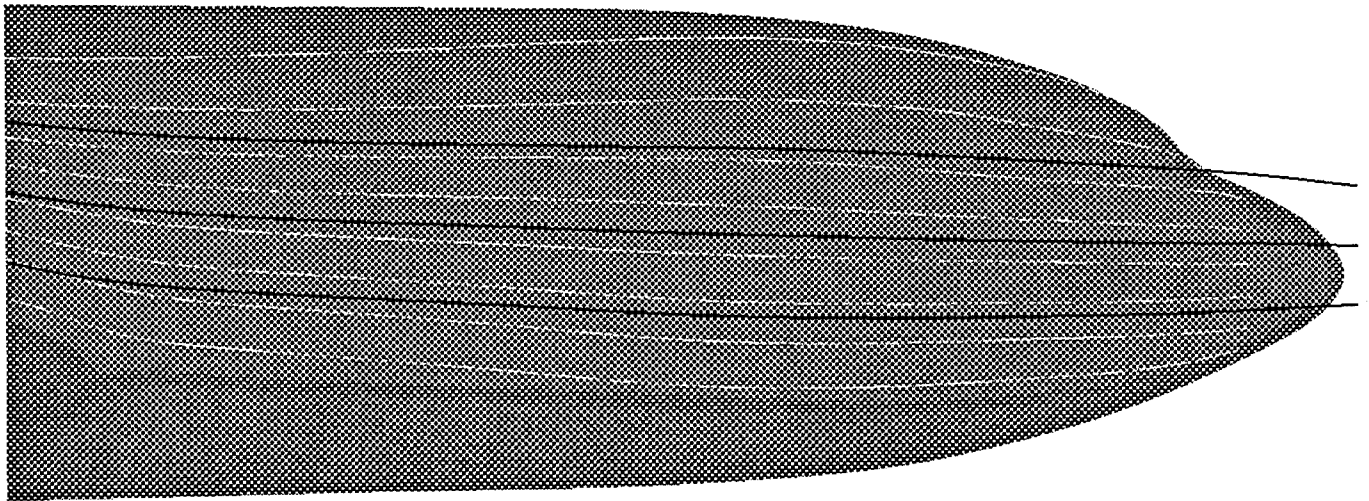
Mach # = 0.95  
Alpha = 5.1 deg  
Beta = 4.1 deg

Figure 4: C-135 with Velocity Vectors on Surface (Windward Side)

*(Mach=0.95, Alpha=5.5 deg, Beta=4.1 deg)*



Leeward Side



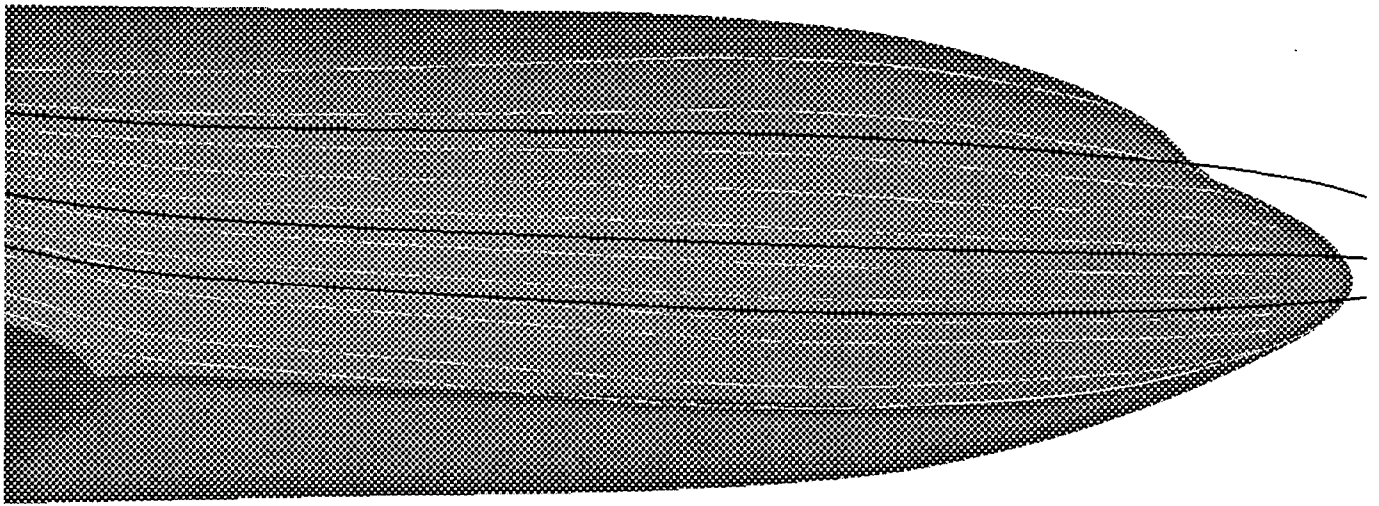
White Streamlines: on surface  
Black Streamlines: above surface

Mach # = 0.95  
Alpha = 1.4 deg  
Beta = -4.1 deg

Figure 5: C-135 with Velocity Vectors on Surface (Leeward Side)

*(Mach=0.95, Alpha=1.4 deg, Beta=-4.1 deg)*

Leeward Side



White Streamlines: on surface  
Black Streamlines: above surface

Mach # = 0.87  
Alpha = 1.4 deg  
Beta = -4.1 deg

Figure 6: C-135 with Velocity Vectors on Surface (Leeward Side)

(Mach=0.87, Alpha=1.4 deg, Beta=-4.1 deg)

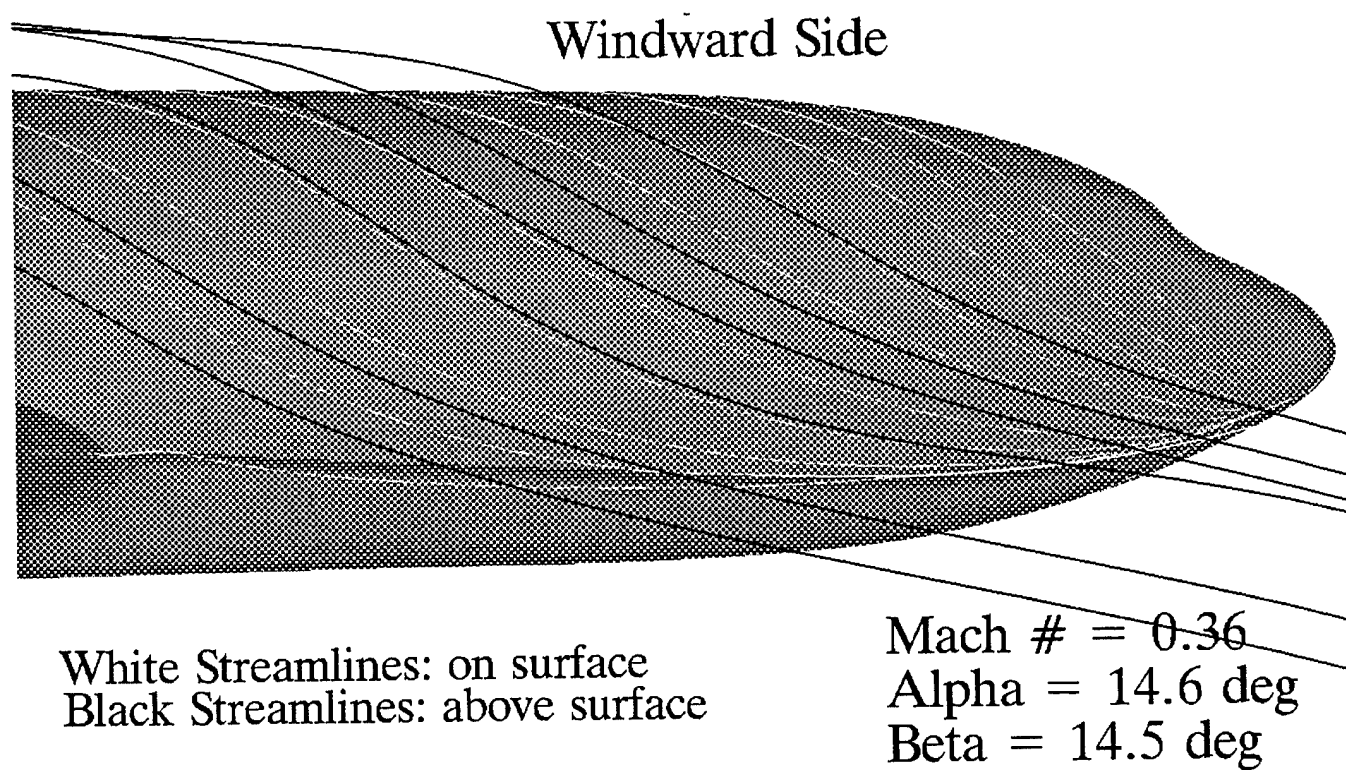
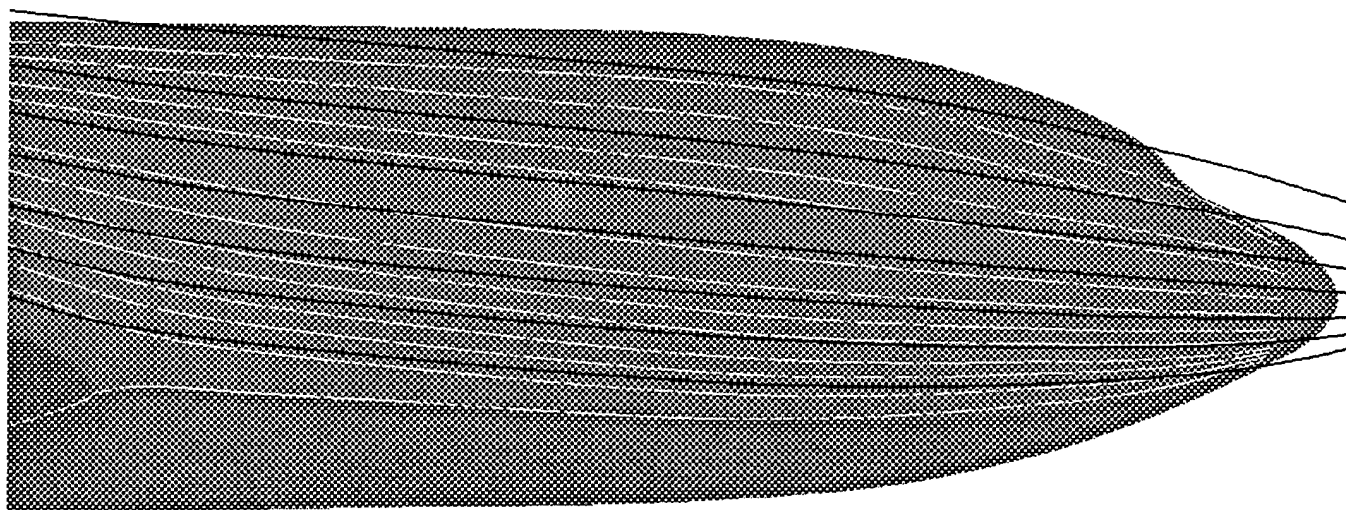


Figure 7: C-135 with Velocity Vectors on Surface (Leeward Side)

(Mach=0.36, Alpha=14.6 deg, Beta=14.5 deg)



White Streamlines: on surface  
Black Streamlines: off surface

Mach = 0.76  
Alpha = 3.0 deg  
Beta = 0.0 deg

Figure 8: C-135 with Velocity Vectors on Surface

*(Mach=0.76, Alpha=3.0 deg, Beta=0.0 deg)*

### 6.3 Particle Trace Plots for Dirty Aircraft

The Particle trace plots shown over the dirty aircraft in Figures 9 - 12 illustrate how the plate/pylon affects the flow over the aircraft. These plots should be used in conjunction with the pictures described in Section 6.4 to gain a better understanding of the air flow.

The particle traces shown in the following figures are plotted on the dirty aircraft in the region around the plate/pylon. The particles were released just upstream of the plate/pylon at a variety of heights and locations in an attempt to view the flow disturbance produced by the modification. Figures 9,10 and 12 show that the dirty flow produced by the plate/pylon swirls a little as it goes around the pylon and then passes under the horizontal stabilizer due to the downwash produced by the wing.

Figure 11 shows the particle traces which occur at severe angles of attack and sideslip. It appears that the flow wraps around the nose and fuselage without severe separation occurring on the plate. A vortical wake is produced off the trailing edge of the plate which passes outboard of the horizontal tail. Part of this wake also follows along the trailing edge of the wing. The lack of separated flow on the plate was initially surprising due to the amount of separated flow which appears on the leeward side of the vertical tail (see Figure 20). Two possible reasons for this lack of separation are the flow angle in the plate's proximity is significantly straightened by the presence of the fuselage, and/or the Euler formulation of the code did not capture the viscous effects which may cause separation.

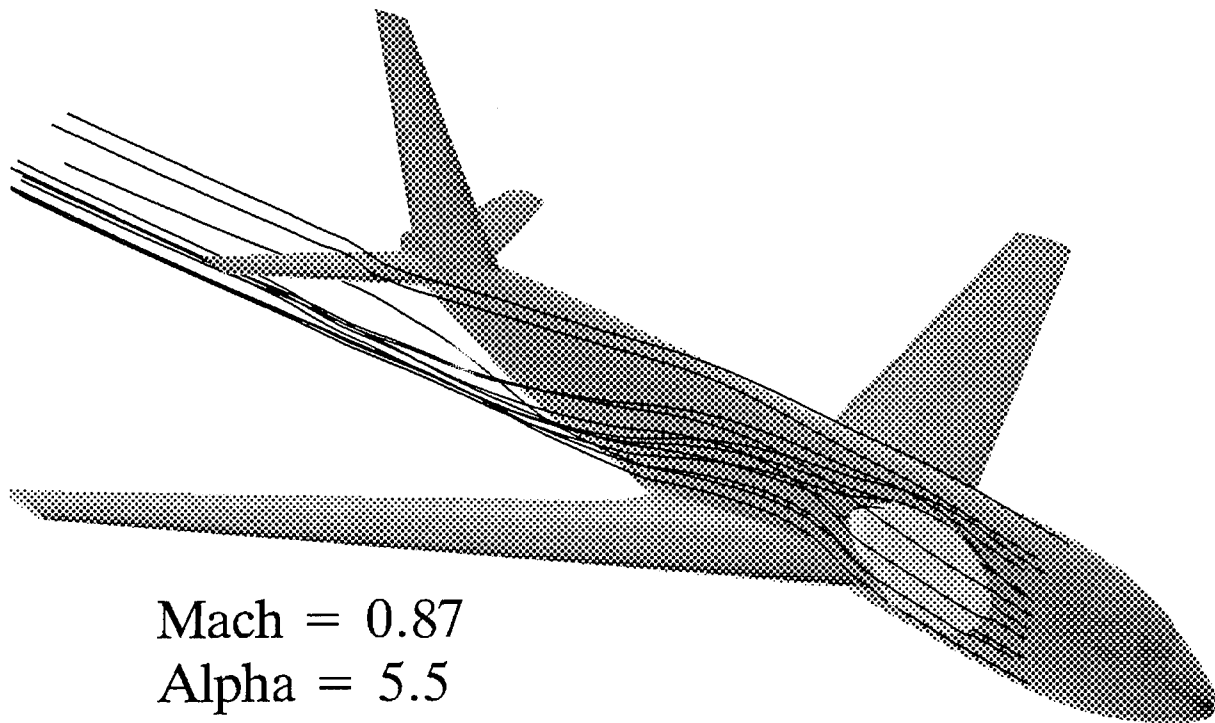


Figure 9: C-135 with Splitter Plate (Particle Traces)  
(*Mach=0.87, Alpha=5.5 deg, Beta=-4.1 deg*)

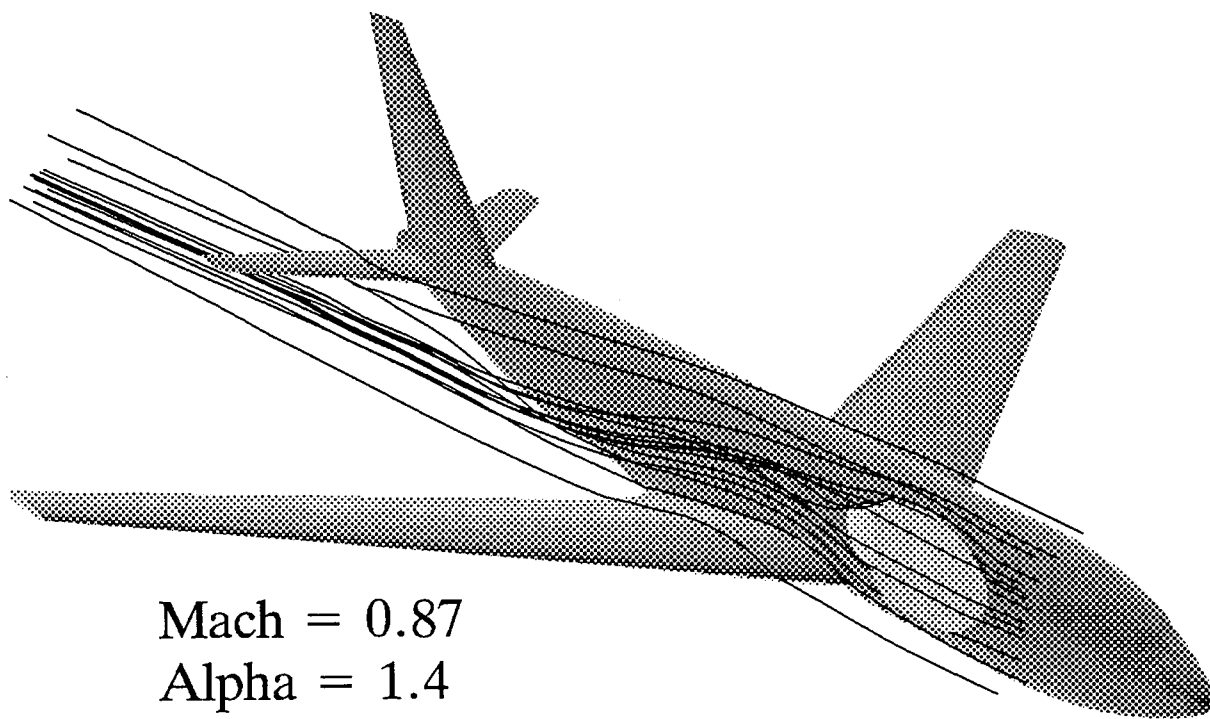
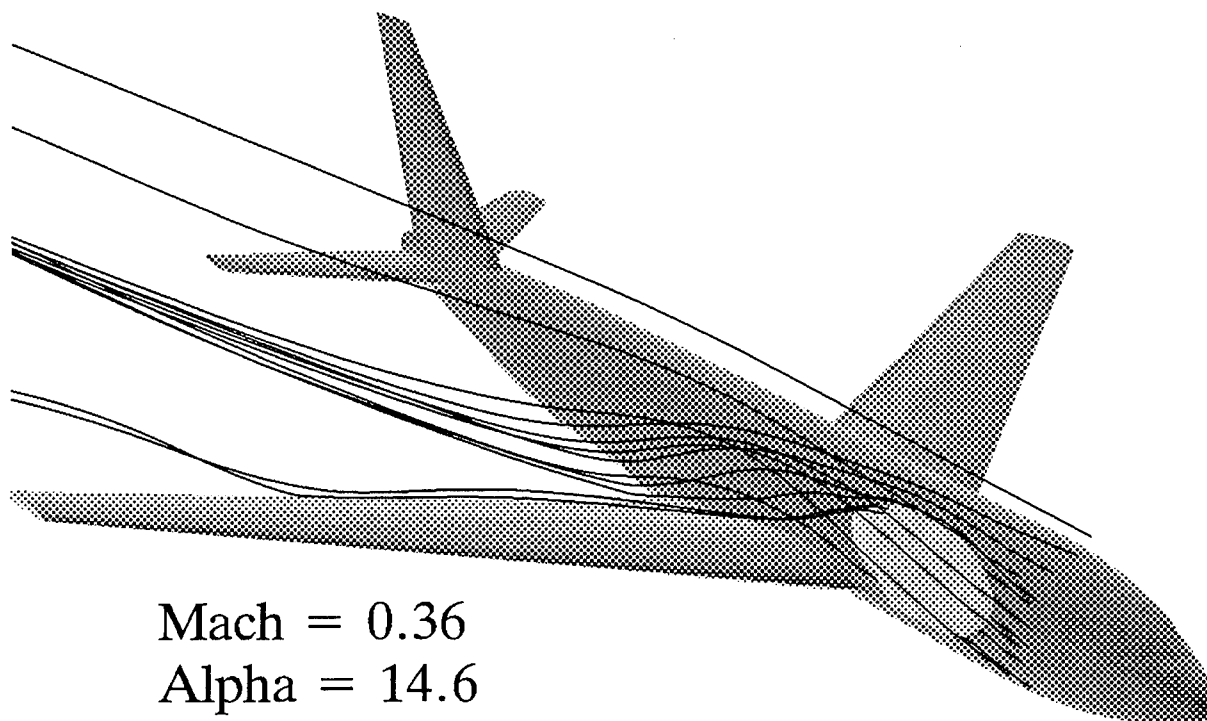


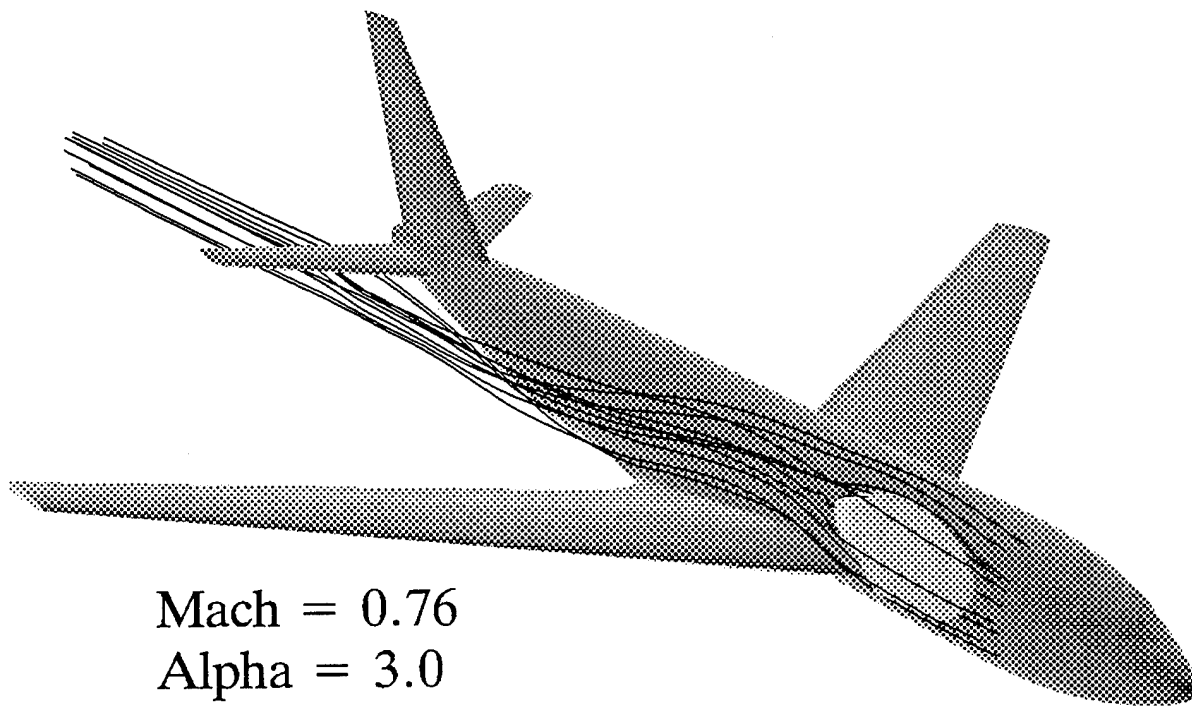
Figure 10: C-135 with Splitter Plate (Particle Traces)  
(Mach=0.87, Alpha=1.4 deg, Beta=-4.1 deg)



Mach = 0.36  
Alpha = 14.6  
Beta = -14.5

Figure 11: C-135 with Splitter Plate (Particle Traces)  
(*Mach=0.36, Alpha=14.6 deg, Beta=-14.5 deg*)





Mach = 0.76  
Alpha = 3.0  
Beta = 0.0

Figure 12: C-135 with Splitter Plate (Particle Traces)  
(Mach=0.76, Alpha=3.0 deg, Beta=0.0 deg)

## **6.4 Mach Number Contour Plot on the Dirty Aircraft**

The Mach number contour plots of the dirty configuration (Figures 13 - 23) illustrate the effects of mounting the plate/pylon. Note: the Mach number range differs on each plot to maximize the flow differentiation for each case.

The following plots contain two views of each dirty configuration run, and one view of the clean configuration where the flight conditions match. These plots should be used in conjunction with the previous particle trace plots to get a full picture of the flowfield. When viewing the contour plots the reader is reminded that for inviscid solutions of this type, peak Mach numbers tend to be higher with shocks occurring further aft.

### **6.4.1 Mach=0.87, Alpha=5.5 deg, Beta=-4.1 deg**

The first pair of plots, Figures 13 and 14, show the Mach=0.87, Alpha=5.5 degrees, Beta=-4.1 degrees case. On these plots, one sees uneven shocks on the wings and the accelerated flow on the leeward side of the vertical tail. Both of these conditions are attributed to the presence of sideslip. Also visible is the acceleration that occurs on the plate where the front begins to droop and on the top of the elliptical pylon. The stagnation that occurs on the pylon just aft of the plate indicates a very thin layer of stagnant flow that is present due to the blunt trailing edge of the plate. The wing aft of the plate/pylon shows lower Mach numbers near the root which leads to the reduced lift and increased rolling moment that the aircraft experiences at these flight conditions.

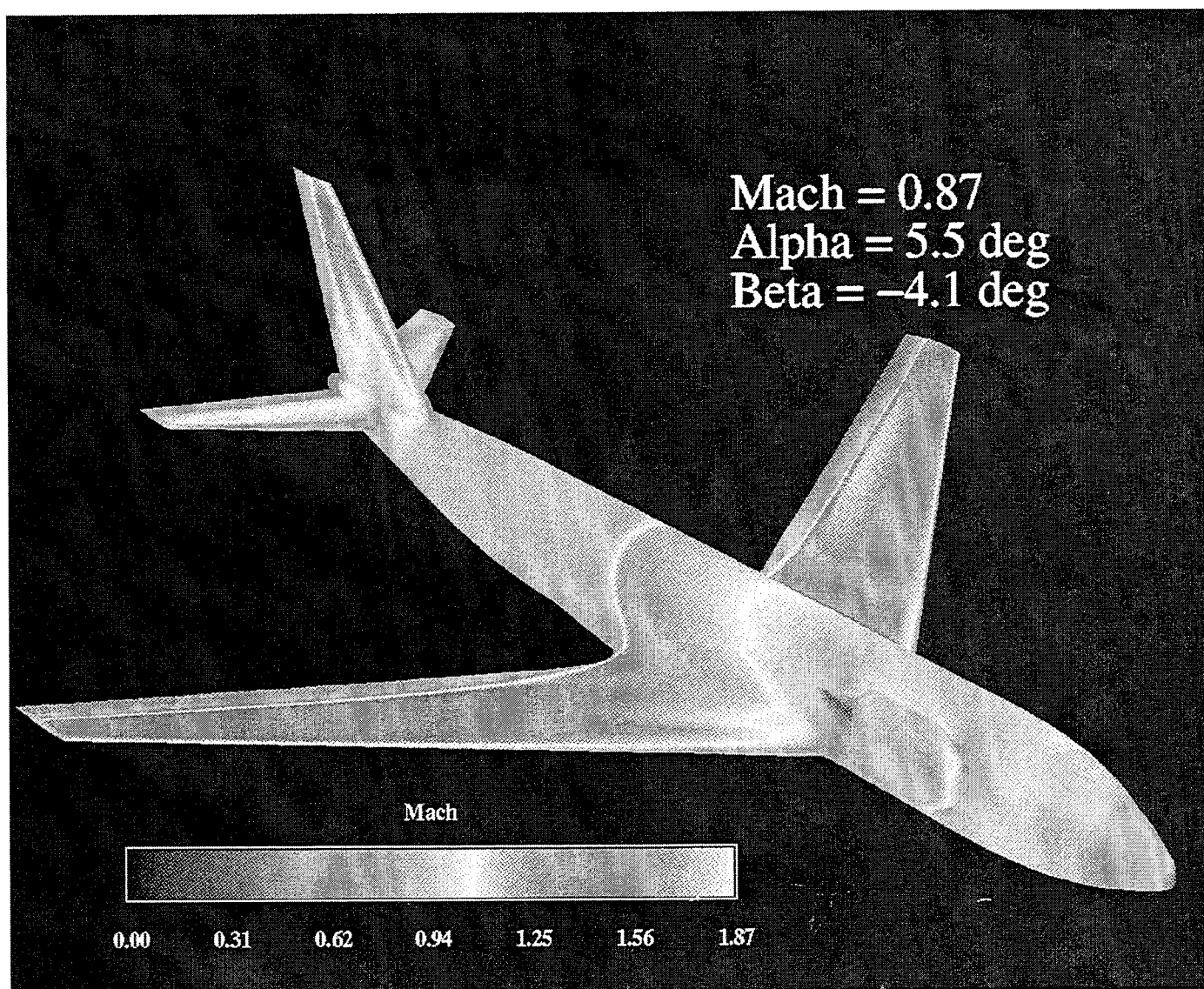


Figure 13: Dirty C-135 (Mach Contours)

*(Mach=0.87, Alpha=5.5 deg, Beta=-4.1 deg)*

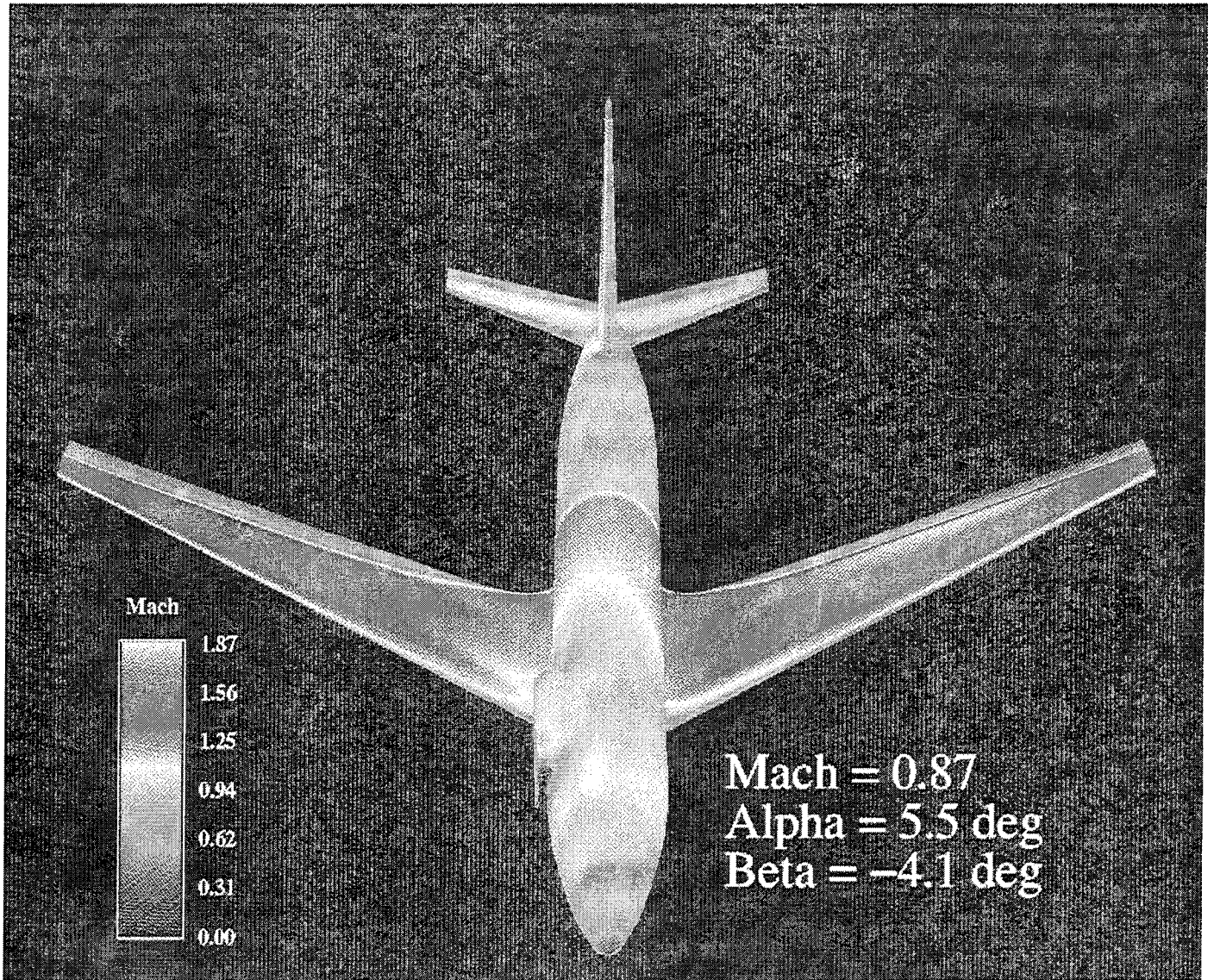


Figure 14: Dirty C-135 (Mach Contours, top view)  
(*Mach=0.87, Alpha=5.5 deg, Beta=-4.1 deg*)

#### **6.4.2 Mach=0.87, Alpha=1.4 deg, Beta=-4.1 deg**

The next set of three plots, Figures 15-17, show the clean and dirty Mach=0.87, Alpha=1.4 degrees, Beta=-4.1 degrees cases. Comparison of Figures 15 and 16 illustrates the differences between the clean and dirty cases from a view above and forward of the aircraft.

The windward side of the aircraft and regions aft of the trailing edges experience negligible differences between the clean and dirty cases. The effect of the pylon in the dirty case includes increased Mach numbers on the top of the fuselage and reduced Mach numbers at the root of the leeward wing.

Figure 17 shows the side view where the top of the plate is visible. This view shows that the flow over the optical window region has a uniform Mach number. Additionally a weak shock is seen where the plate droops and a stagnation region is located aft of the plate's trailing edge.

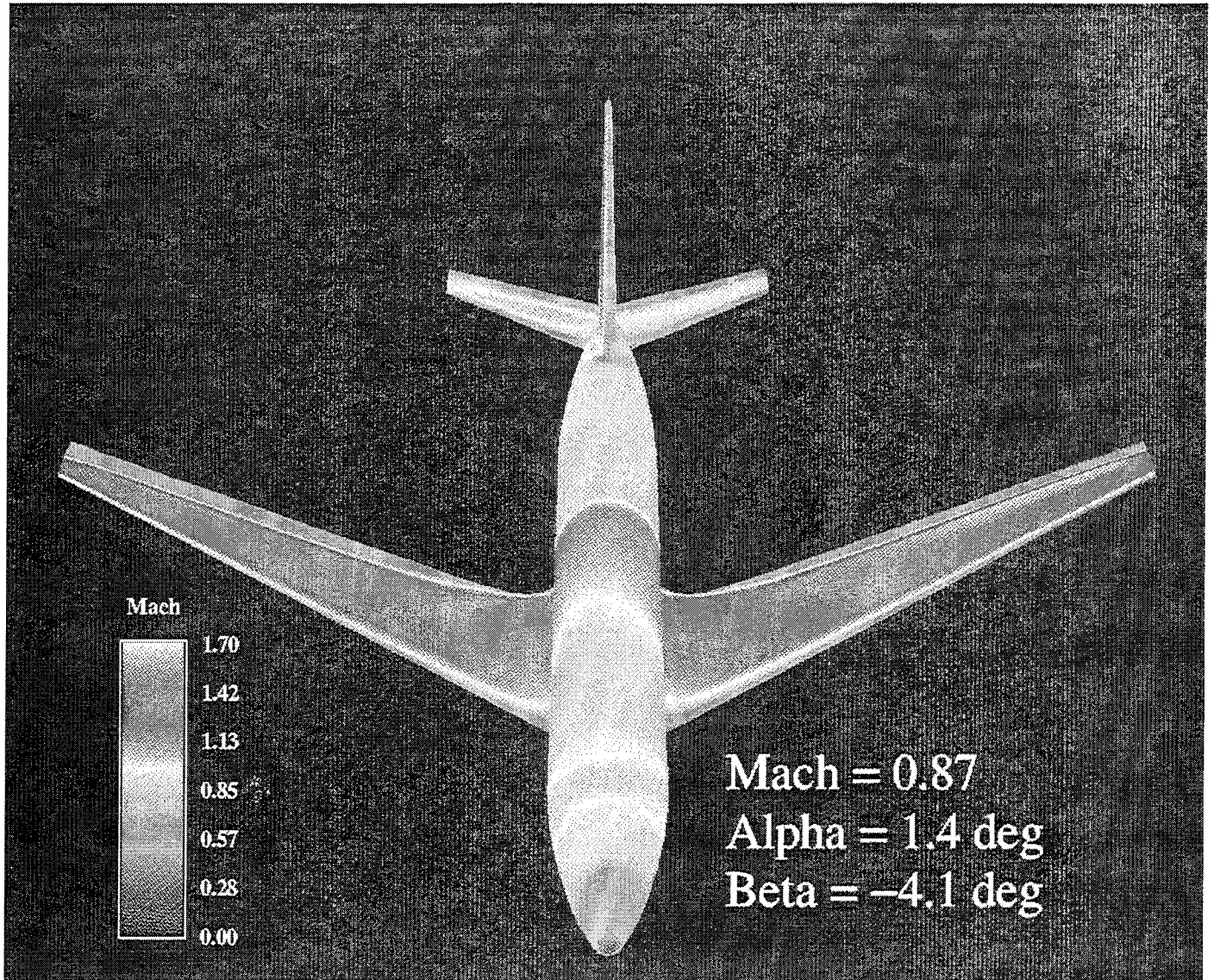


Figure 15: Clean C-135 (Mach Contours, top view)

*(Mach=0.87, Alpha=1.4 deg, Beta=-4.1 deg)*



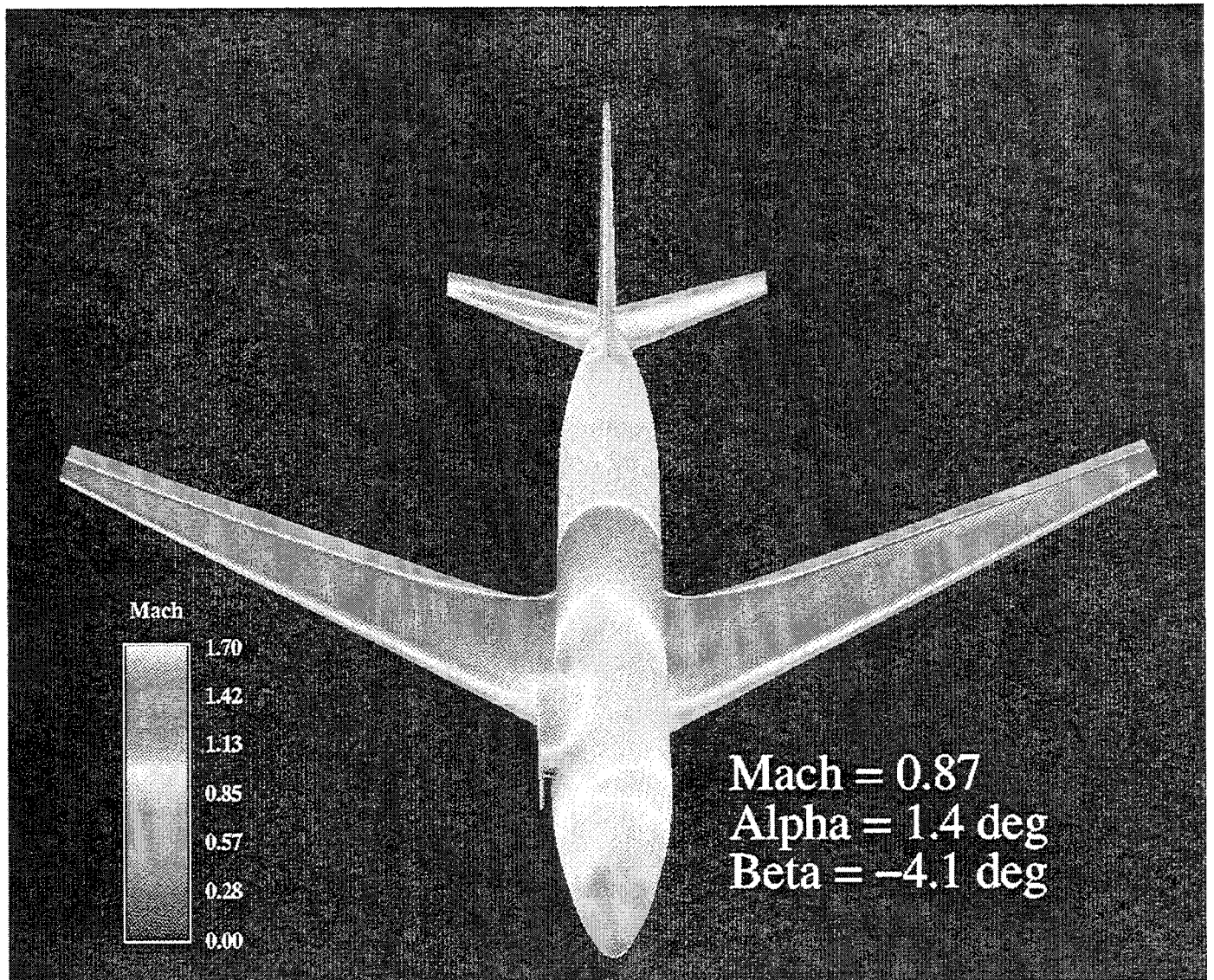


Figure 16: Dirty C-135 (Mach Contours, top view)  
(*Mach=0.87, Alpha=1.4 deg, Beta=-4.1 deg*)

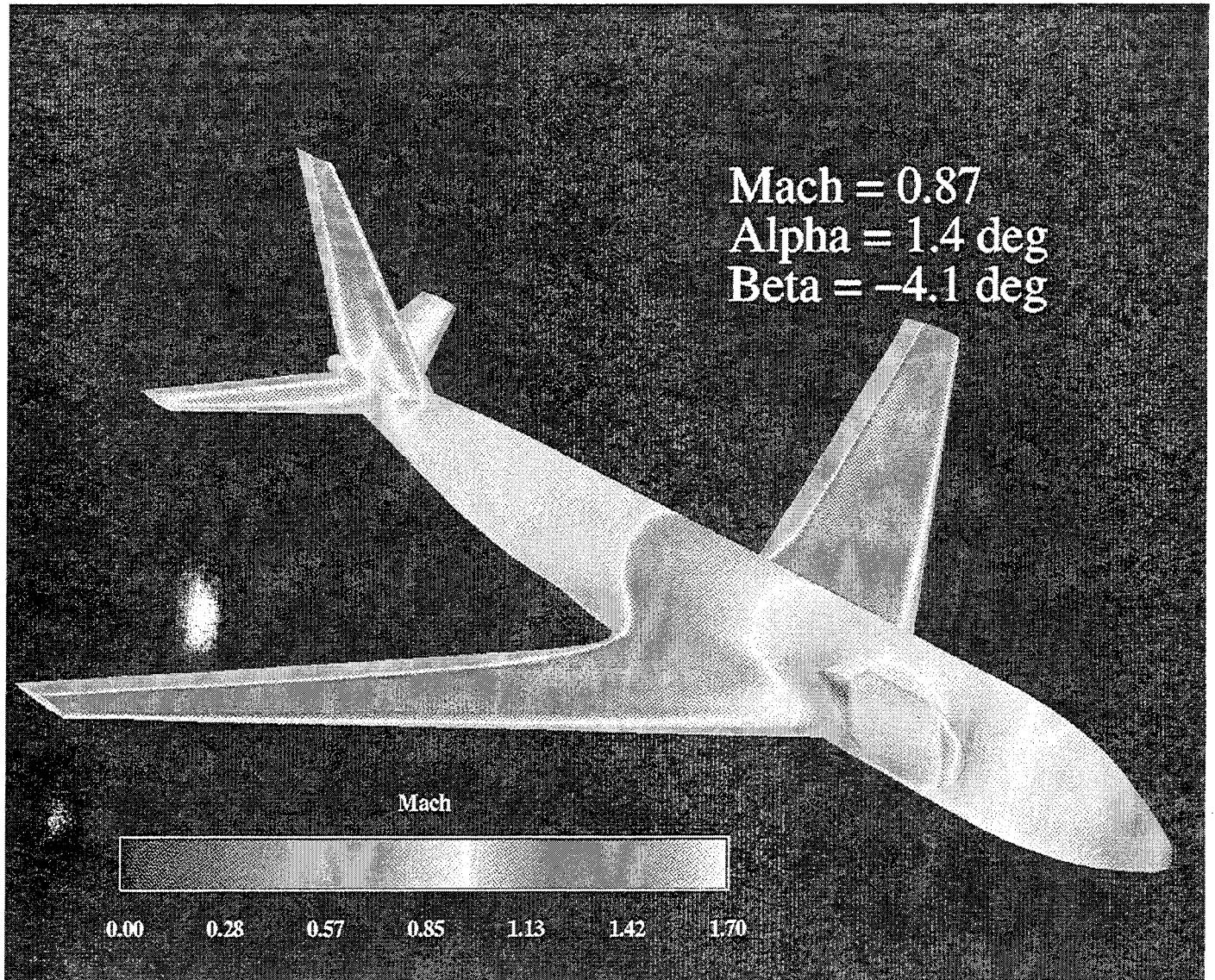


Figure 17: Dirty C-135 (Mach Contours)

*(Mach=0.87, Alpha=1.4 deg, Beta=-4.1 deg)*



### **6.4.3 Mach=0.36, Alpha=14.6 deg, Beta=-14.5 deg**

In the next set of three plots, Figures 18-20, show the clean and dirty Mach=0.36, Alpha=14.6 degrees, Beta=-14.5 degrees cases. Comparisons of Figures 18 and 19 illustrate the differences between the clean and dirty cases from a view above and forward of the aircraft.

The windward side of the aircraft and regions aft of the trailing edges experience negligible differences between the clean and dirty cases. The effect of the pylon in the dirty case is somewhat localized in the fuselage region but extends out the leeward wing, as previously seen with the particle traces.

Figure 20 shows the side view where the top of the plate is visible. This view shows that the flow over the optical window region has a slightly nonuniform Mach number distribution. One must remember when viewing these data that optical measurements will not be taken during this severe flight condition.

Results from this flight condition should be viewed with a critical eye due to the severity of the flight conditions and the amount of separated flow that is produced.

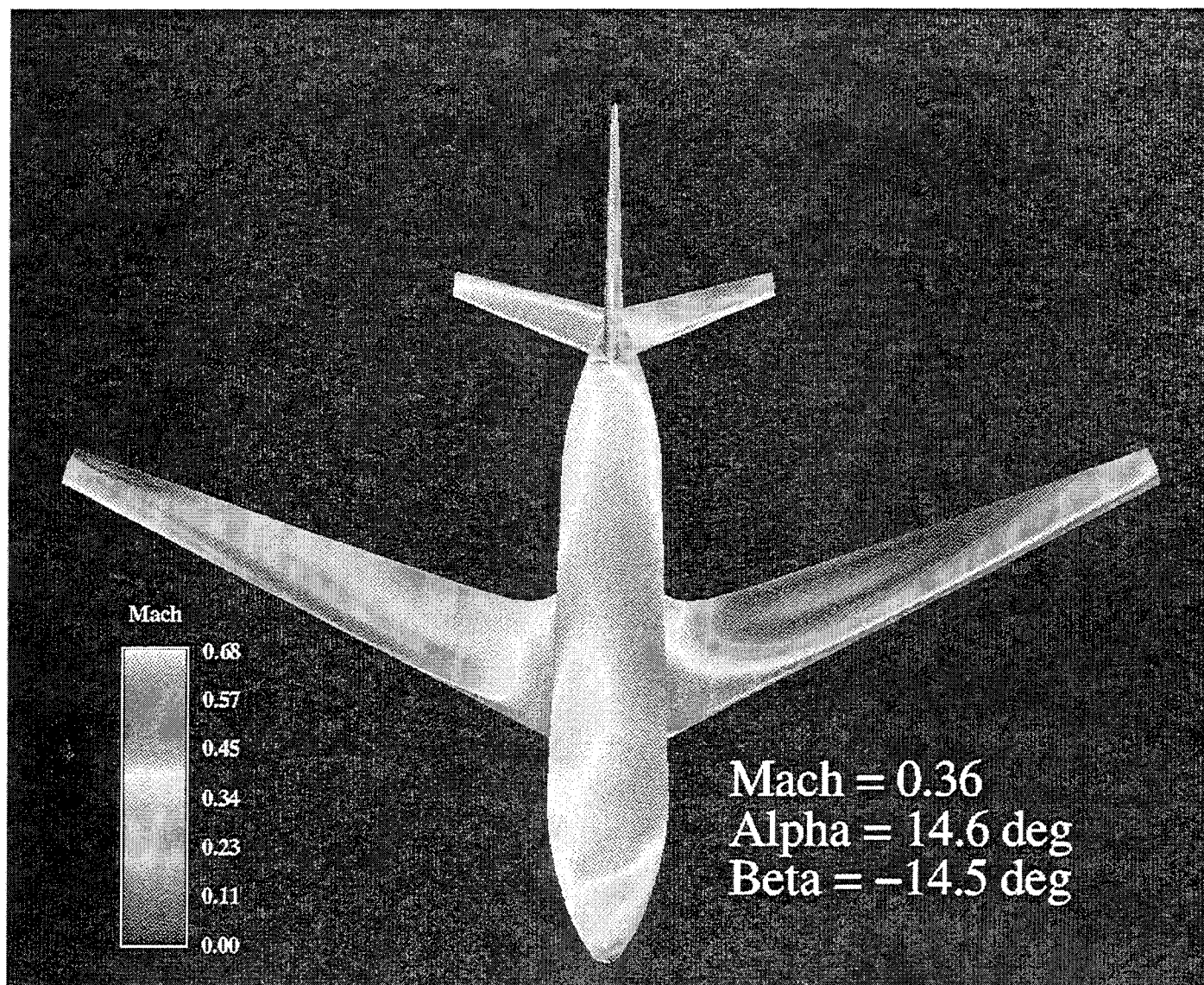


Figure 18: Clean C-135 (Mach Contours, top view)  
(Mach=0.36, Alpha=14.6 deg, Beta=-14.5 deg)

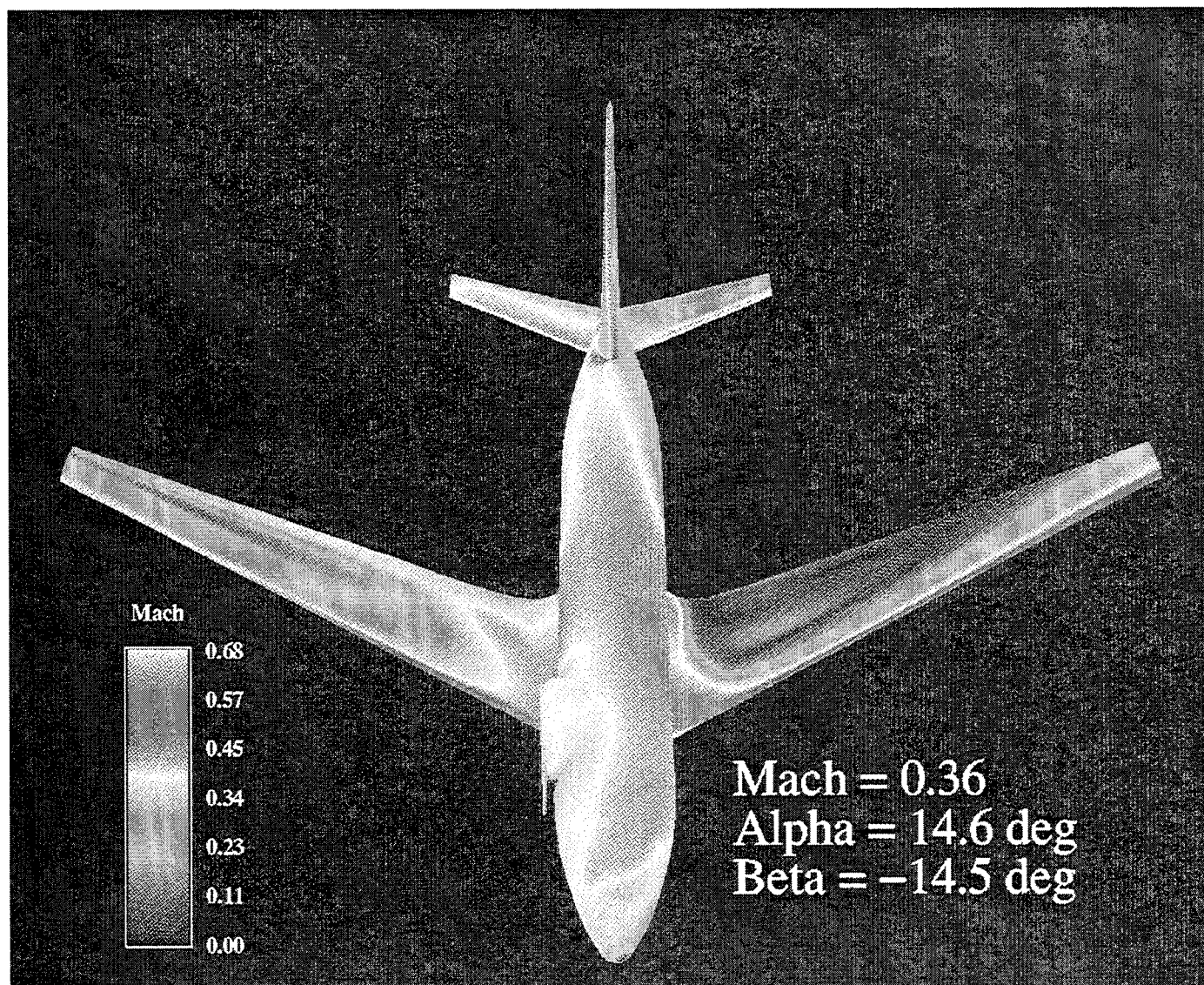


Figure 19: Dirty C-135 (Mach Contours, top view)  
(Mach=0.36, Alpha=14.6 deg, Beta=-14.5 deg)

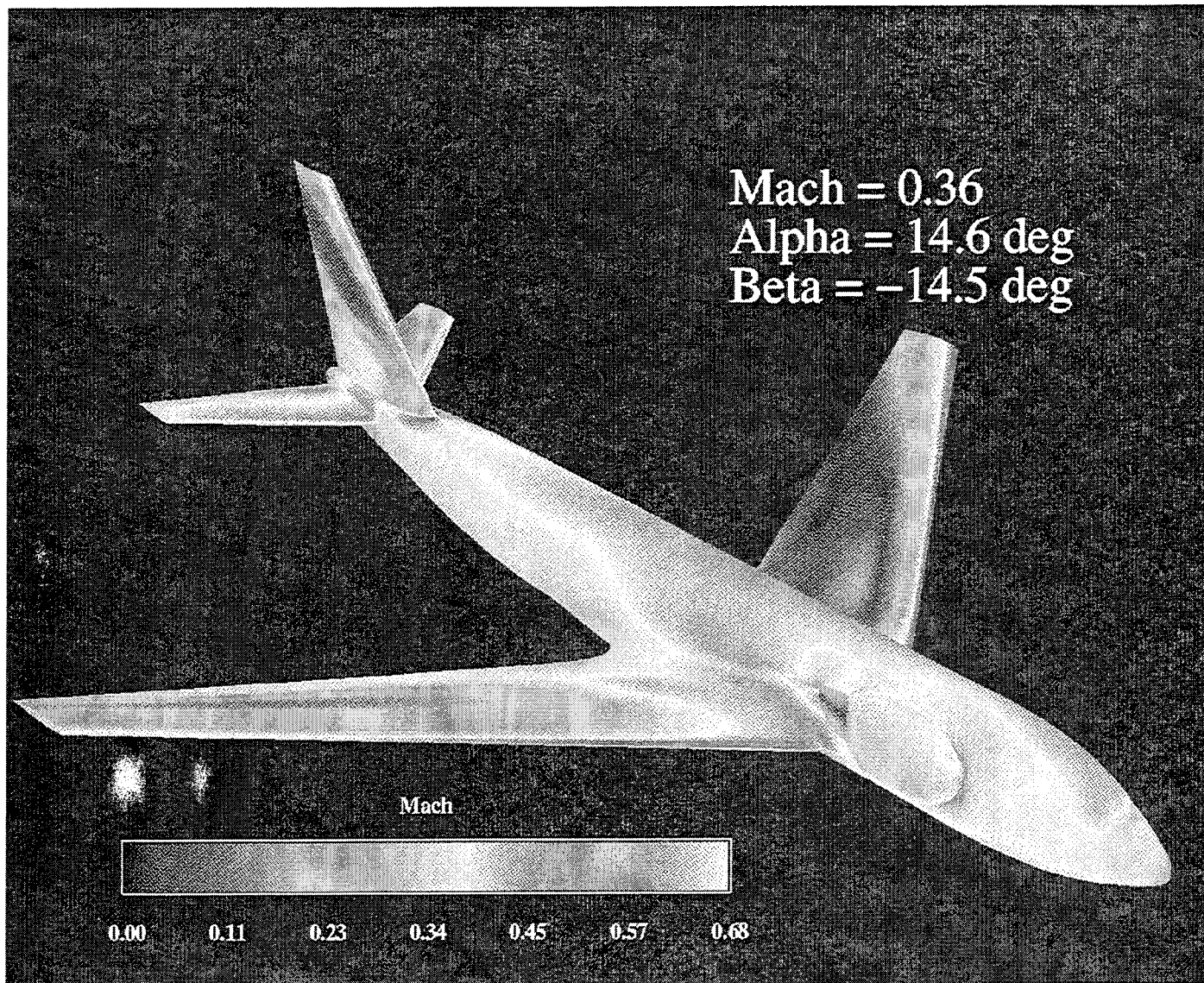


Figure 20: Dirty C-135 (Mach Contours)

*(Mach=0.36, Alpha=14.6 deg, Beta=-14.5 deg)*

#### **6.4.4 Mach=0.76, Alpha=3.0 deg, Beta=0.0 deg**

In the next set of three plots, Figures 21-23, show the clean and dirty Mach=0.76, Alpha=3.0 degrees, Beta=0.0 degrees cases. Comparisons Figures 21 and 22 illustrate the differences between the clean and dirty cases from a view above and forward of the aircraft.

The windward side of the aircraft and regions aft of the trailing edges experience negligible differences between the clean and dirty cases. The effect of the pylon in the dirty case includes, increased Mach numbers on the top of the fuselage, reduced Mach numbers at the root of the wing (pylon side), and localized stagnations at the front and aft of the pylon.

Figure 23 shows the side view where the top of the plate is visible. Like previous plots, this view shows that the flow over the optical window region has a uniform Mach number distribution, the flow over the plate does not reach Mach 1, and that a stagnation aft of the plate is produced. (Figure 2 shows the position of the optical window in the plate.)



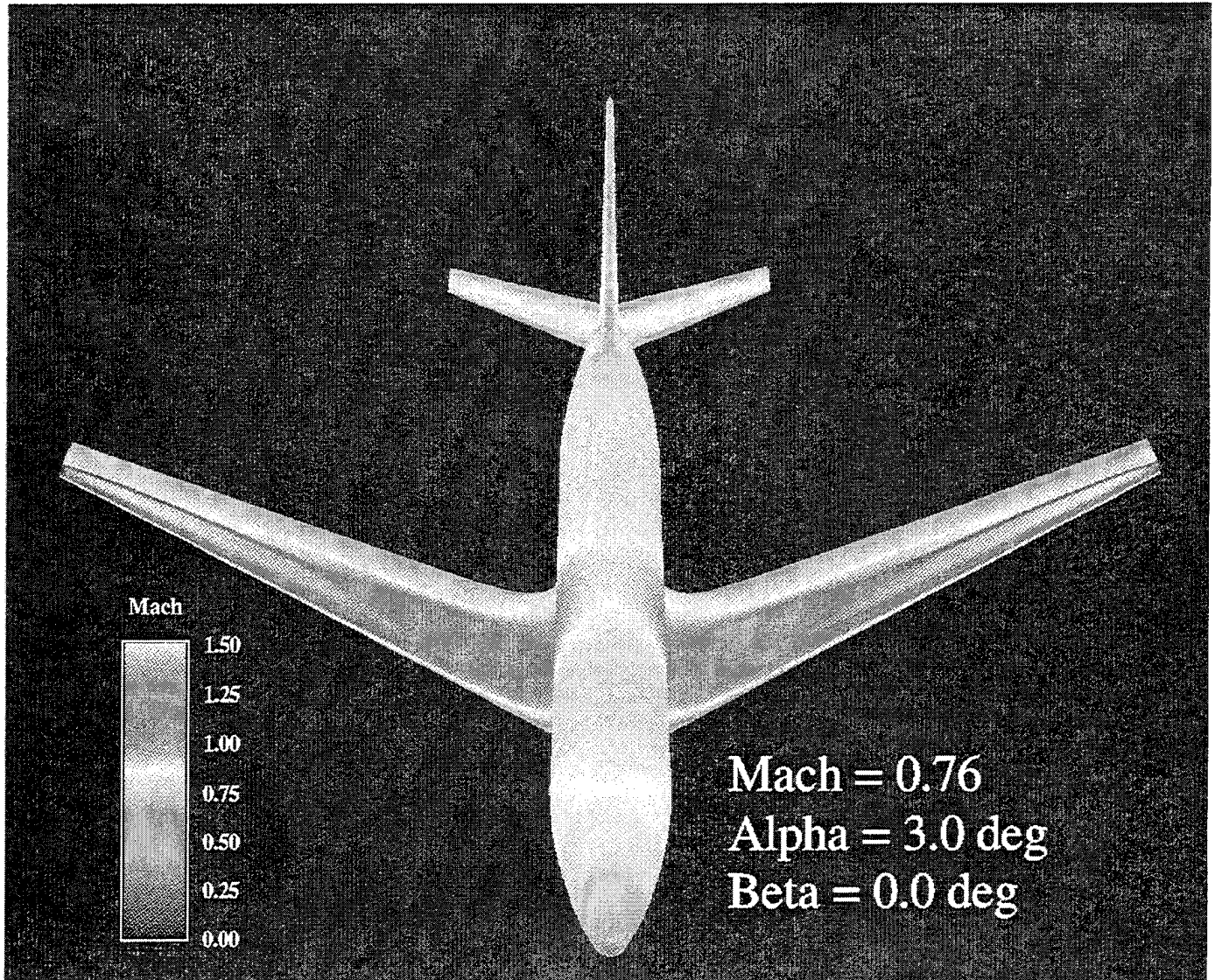


Figure 21: Clean C-135 (Mach Contours, top view)  
(*Mach=0.76, Alpha=3.0 deg, Beta=0.0 deg*)

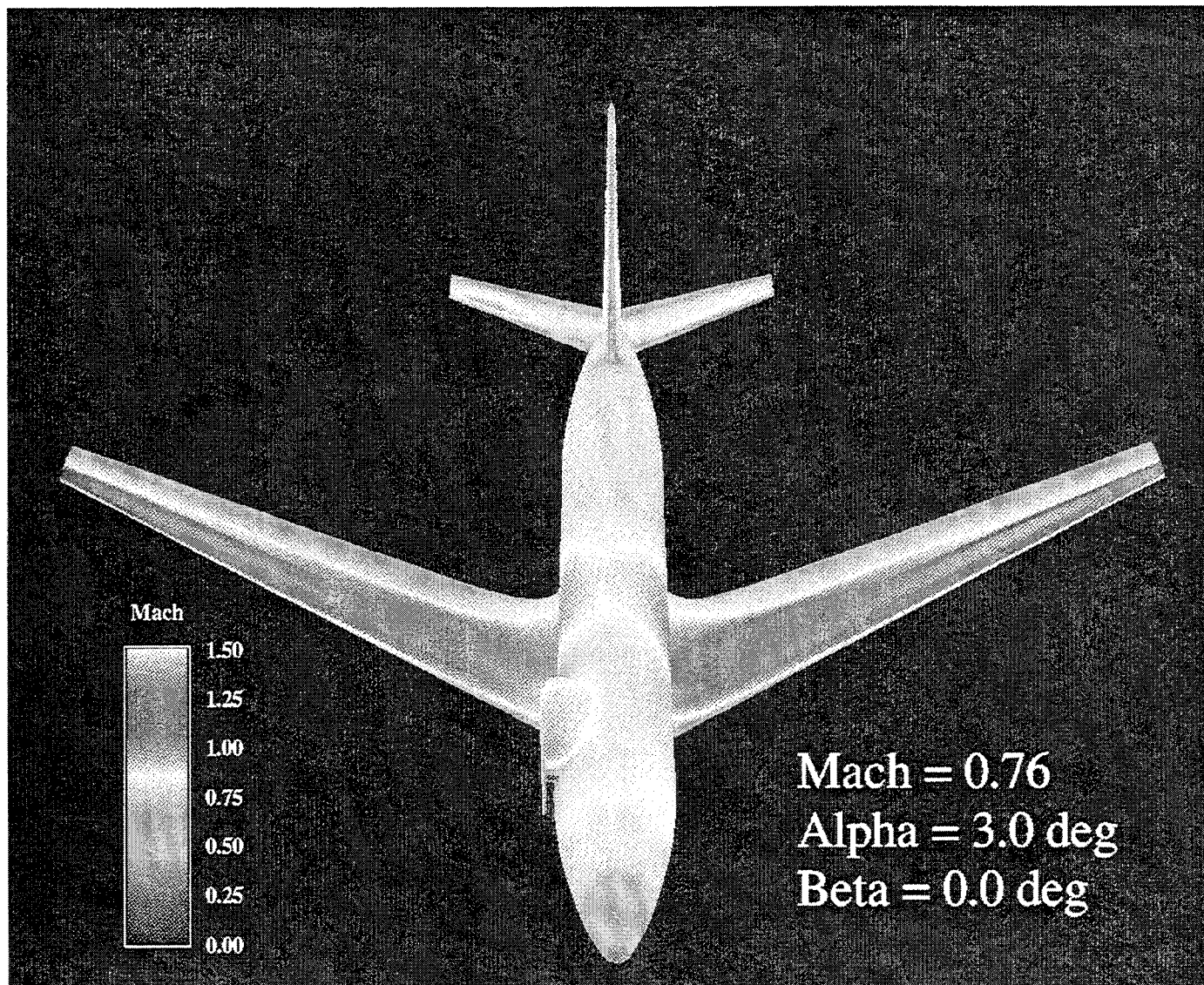


Figure 22: Dirty C-135 (Mach Contours, top view)  
(*Mach=0.76, Alpha=3.0 deg, Beta=0.0 deg*)

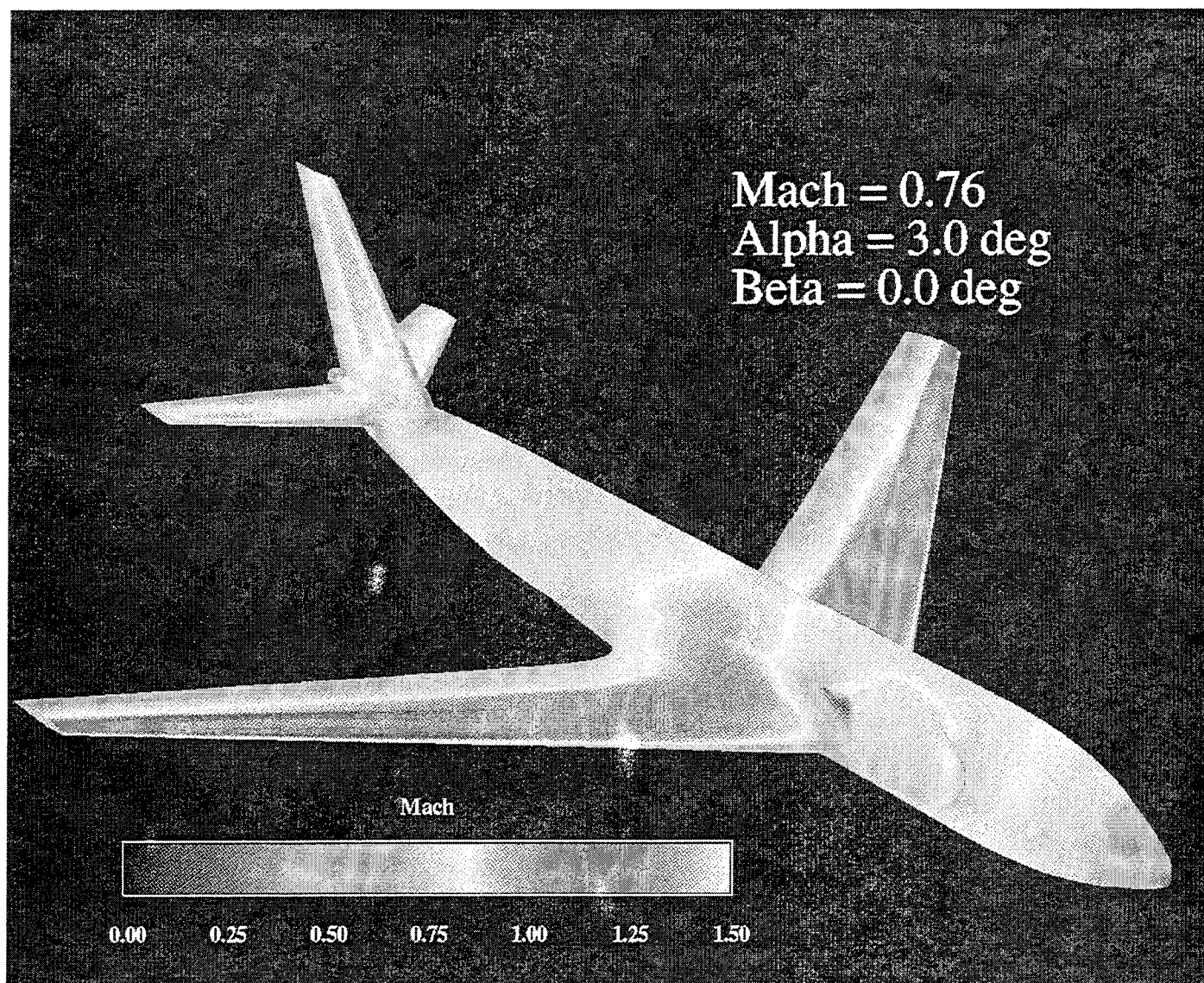


Figure 23: Dirty C-135 (Mach Contours)

*(Mach=0.76, Alpha=3.0 deg, Beta=0.0 deg)*



## 6.5 Pressure Coefficient Contour Plots on the Plate/Pylon

The pressure coefficient ( $C_p$ ) contour plots on the plate/pylon shown in Figures 25 - 27 illustrate the aerodynamic loading. The plot for one case ( $Mach=0.87$ ,  $\alpha=1.4$ ,  $\beta=-4.1$ ) was omitted due to its similarity to the other Mach 0.87 case. Small differences do occur, but the tabulated  $C_p$  values offer a better comparison tool than the visual plot. Note: the  $C_p$  range differs on each plot to maximize the flow differentiation for each case.

For each of the three  $C_p$  plots, the plate/pylon assembly is shown from four different view points without the aircraft. Figure 24 is included below to clarify the orientation of each view.

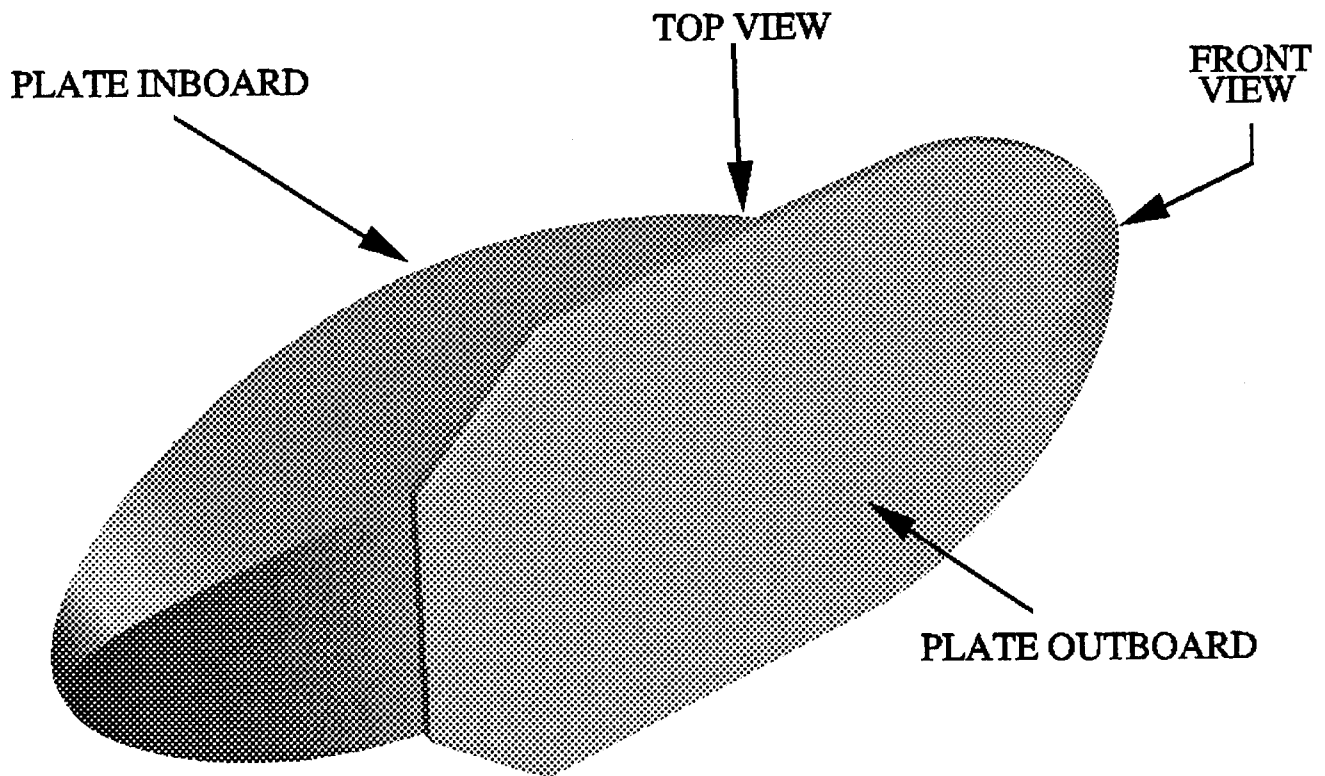


Figure 24: Splitter Plate and Pylon View Orientation

Figure 25 shows the splitter plate and pylon configuration for the Mach=0.87, Alpha=5.5 degrees, Beta=-4.1 degrees case. Flow stagnations are seen to occur on the leading edge of the plate and at the front and back of the elliptical pylon. Flow accelerations occur along the plate droop region and on the top and bottom of the pylon. These accelerated regions, indicated by the lower (more negative) Cps, are low pressure regions producing lift. A side force is produced by the combined low pressure on the outboard side of the plate and the high pressure on the inboard side. Due to the droop of the plate leading edge, the forces acting on the plate provide loads in the positive y and negative x axis directions with respect to the geometric coordinate system. As expected with an elliptical wing at angle of attack, the pressure distribution on the pylon indicates that lift is produced.

Figure 26 shows the Mach=0.36, Alpha=14.6 degrees, Beta=-14.5 degrees case. With the severity of the flight conditions, an unusual stagnation region is produced on the inboard side of the plate creating a fairly strong side force in the positive y-direction. Surprisingly, the flow on the outboard side of the plate does not appear to be separated and the distribution is uniform in the region of interest. Like the previous case the pylon acts as a lifting body at these flow conditions. It is expected that some separation would occur at this flight condition but the inviscid flow solver was unable to predict it.

Figure 27 shows the Mach=0.76, Alpha=3.0 degrees, Beta=0.0 degrees case. The Cp distribution shown in Figure 26 is very similar to the distribution shown in Figure 24. The Cp ranges of the two cases are different, however, the previous discussion holds for this case as well.

# Splitter Plate and Pylon

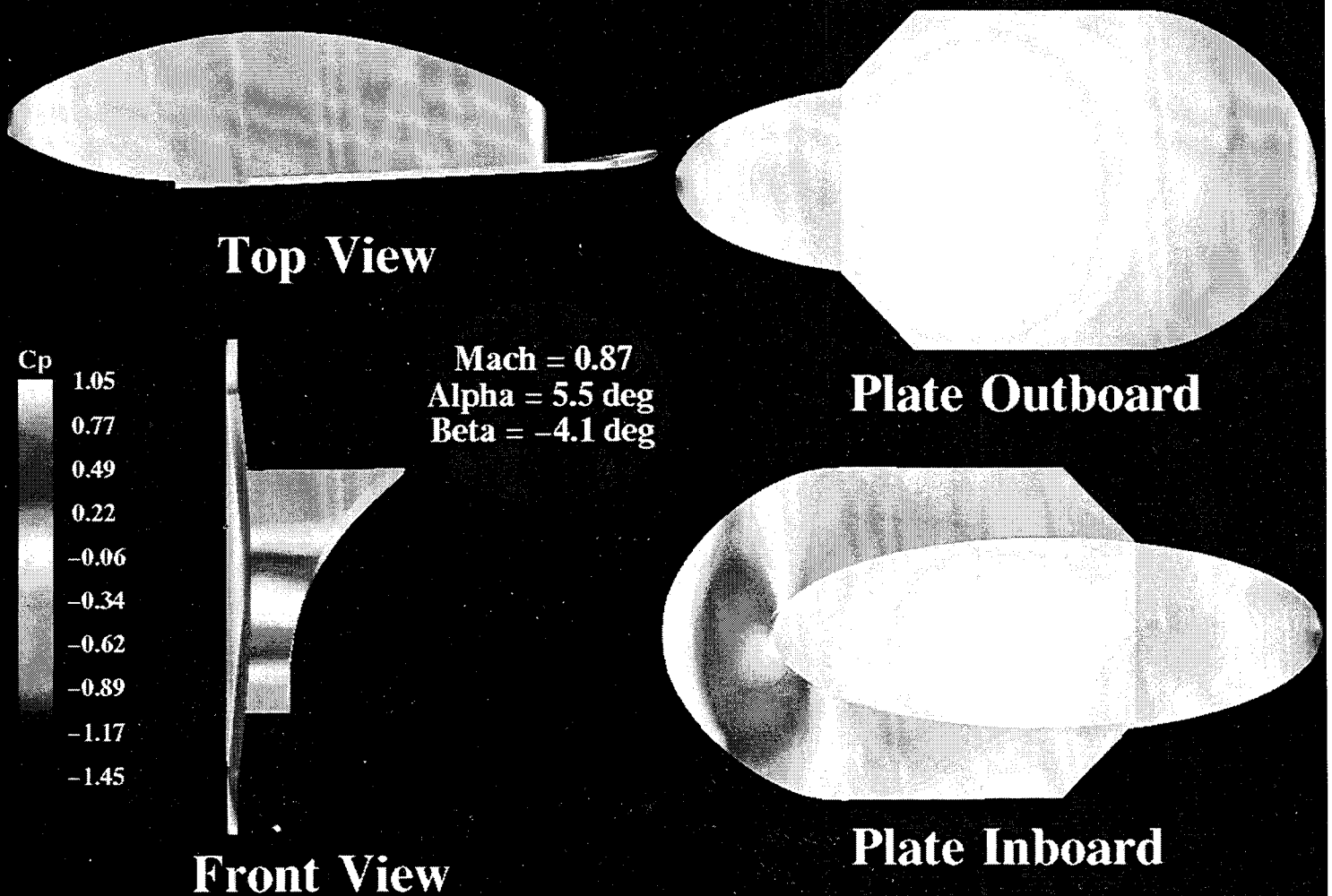


Figure 25: Splitter Plate and Pylon (Cp Contours)

(Mach=0.87, Alpha=5.5 deg, Beta=-4.1 deg)

# Splitter Plate and Pylon

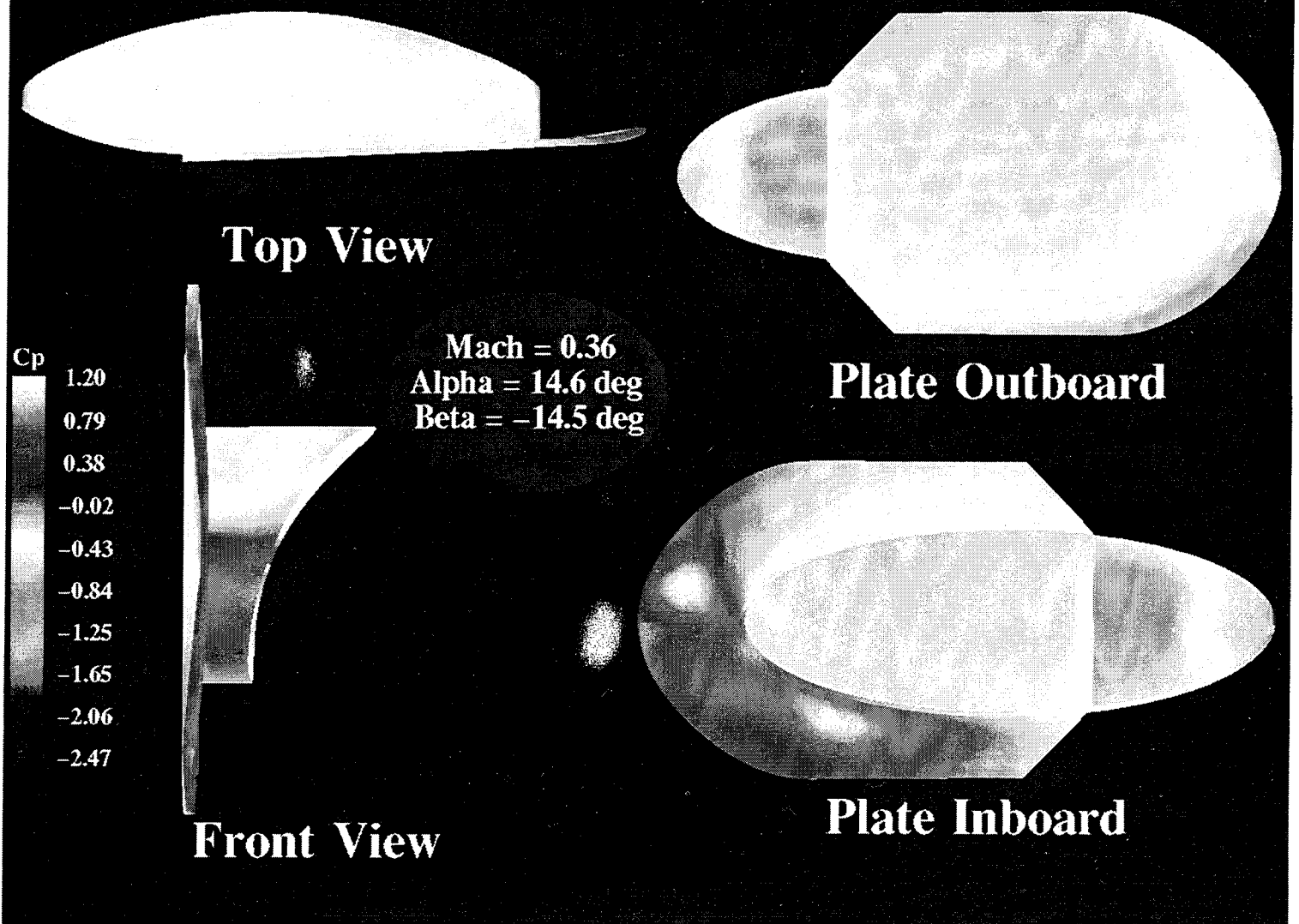


Figure 26: Splitter Plate and Pylon (Cp Contours)

(Mach=0.36, Alpha=14.6 deg, Beta=-14.5 deg)

# Splitter Plate and Pylon

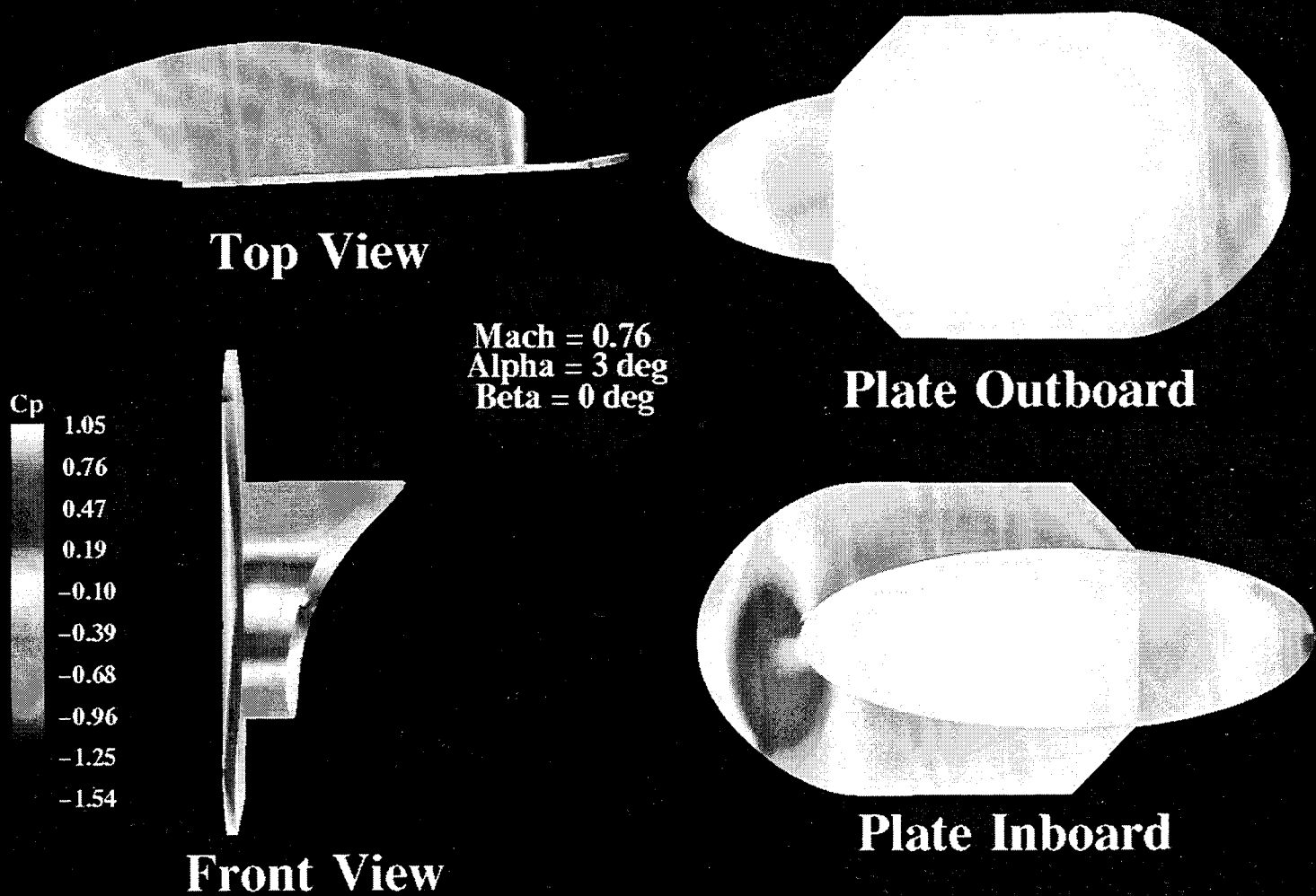


Figure 27: Splitter Plate and Pylon ( $C_p$  Contours)

(Mach=0.76, Alpha=3.0 deg, Beta=0.0 deg)

## **6.6 PLOT3D Solution Files**

Solution files for all nine cases are available in PLOT3D format. These files can be used to extract additional information of interest. A picture only provides a snapshot of the results, while interactive viewing of the data provides a more complete insight into the results. (Interested parties should contact WL/FIMC for access to the solution files.)

## **6.7 Tabulated Cp Data on the Plate/Pylon**

Tabulated Cp data on the plate/pylon for the four dirty cases is provided in the Appendix. This data was generated for conversion into loads data by the 4950TW. The table provides x, y, and z locations for each discrete panel center on the plate/pylon surfaces, the area of each panel, the unit normal components of each panel and the Cp at the centroid of each panel for the four dirty cases.

## **6.8 Cp Contour Plots on Symmetry Plane**

Figures 28-29 illustrate two Cp contour plots on the symmetry plane of the clean aircraft. This data was generated for comparison with published data on the C-135 aircraft [5].

Figure 28 shows a side view of the flow at the aircraft symmetry plane for the Mach=0.76, Alpha=3.0 degree case. Visible are the stagnations at the nose, the canopy and the leading edge of the vertical tail. Also visible are the low pressure regions produced by the flow accelerating over the canopy and wing.

Figure 29 is a close-up of the nose region of the same case. The Cp range has changed to accentuate the flow features present. This plot was generated to answer some questions about positioning probes.

## Cp on Symmetry Plane

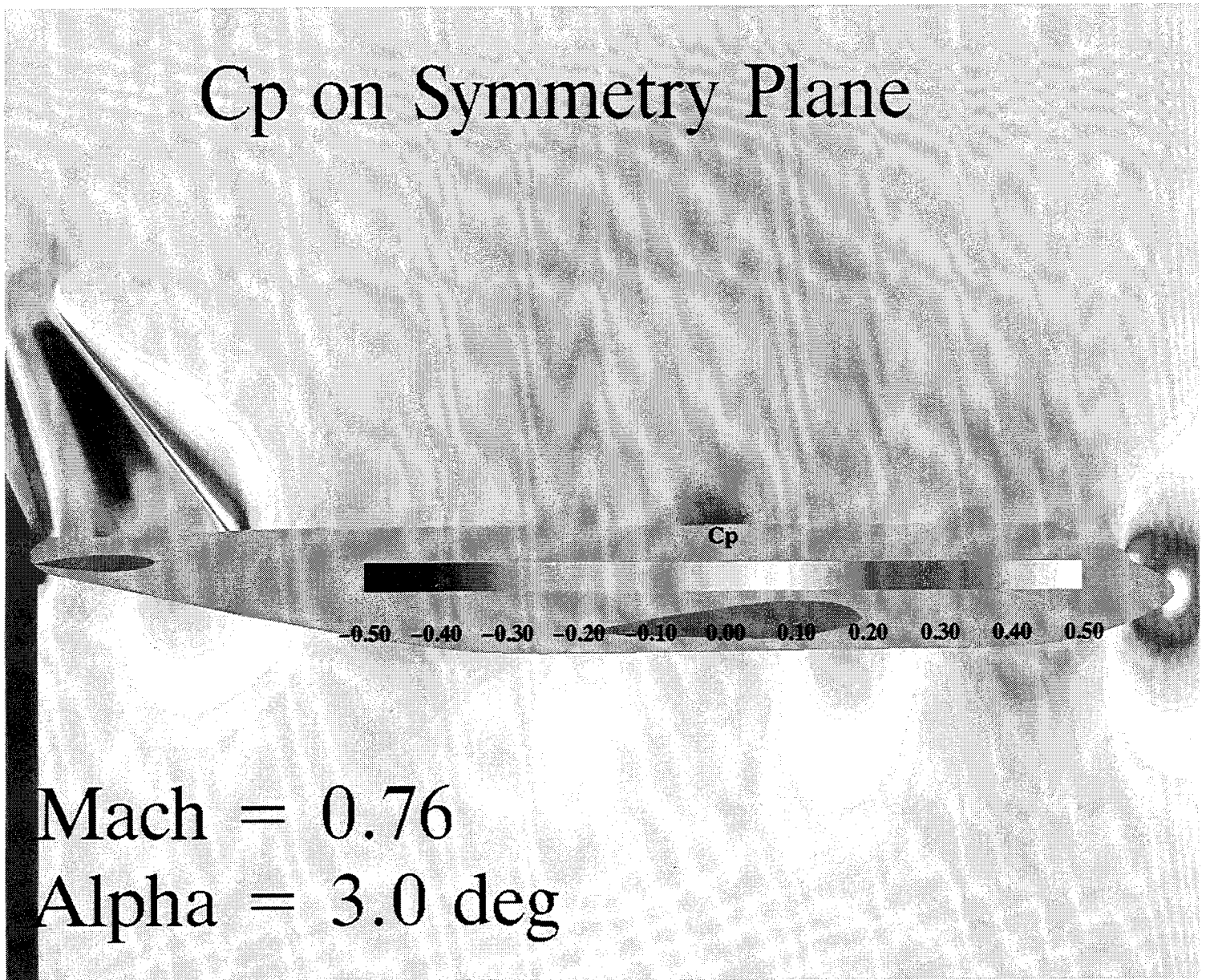


Figure 28:  $C_p$  on Symmetry Plane (Mach=0.76, Alpha=3.0 deg, Beta=0.0 deg)



# Cp on Symmetry Plane

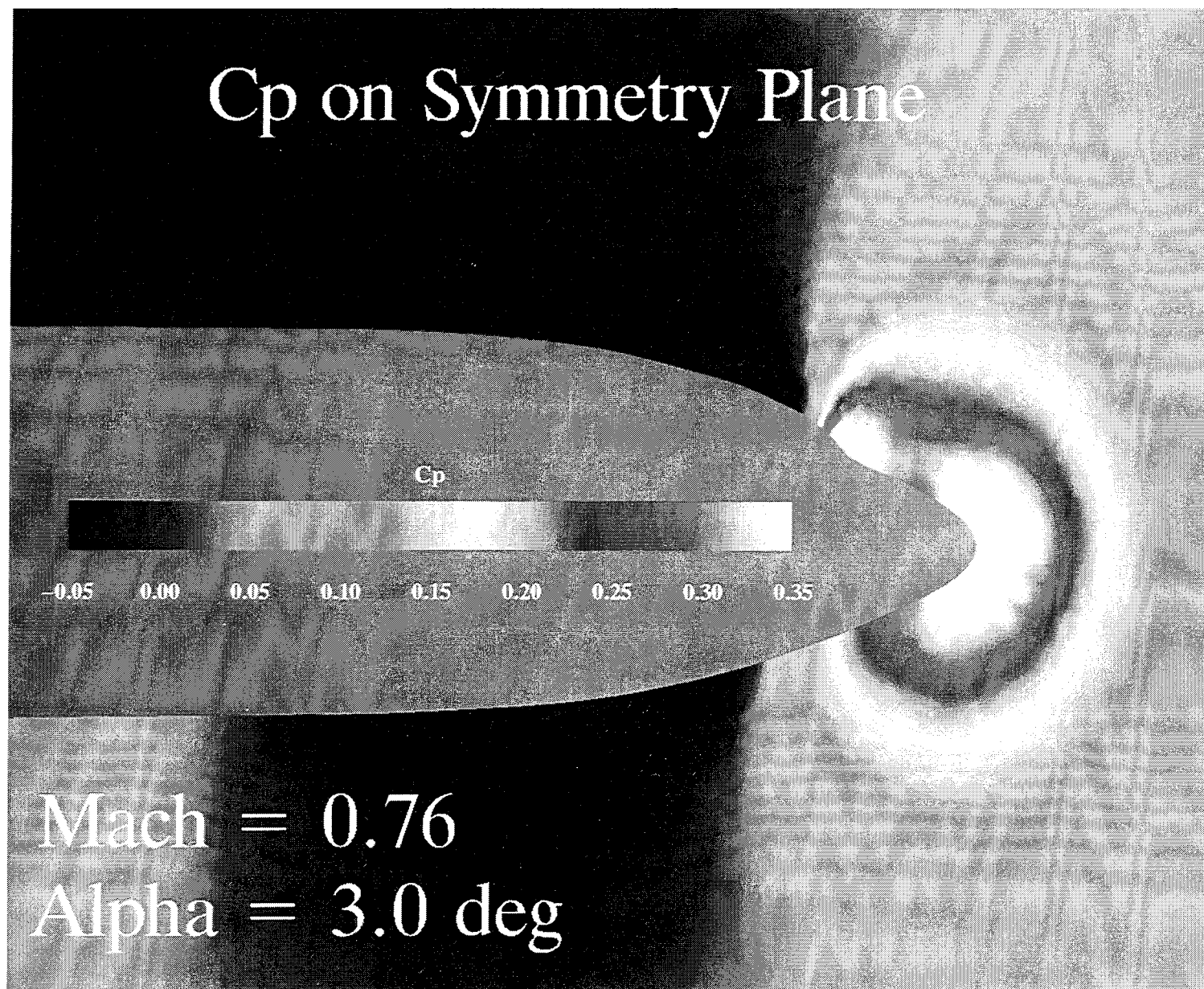


Figure 29: Cp on Symmetry Plane (Mach=0.76, Alpha=3.0 deg, Beta=0.0 deg)



## 6.9 Fuselage X-station Plots

Plots of  $C_p$  vs. X-station and Mach number vs. X-station are provided along the clean configuration centerline in Figures 30 - 33. These plots provide data on both the top and bottom of the fuselage for the reader's convenience.

## Cp vs. X-station (fuselage top centerline)

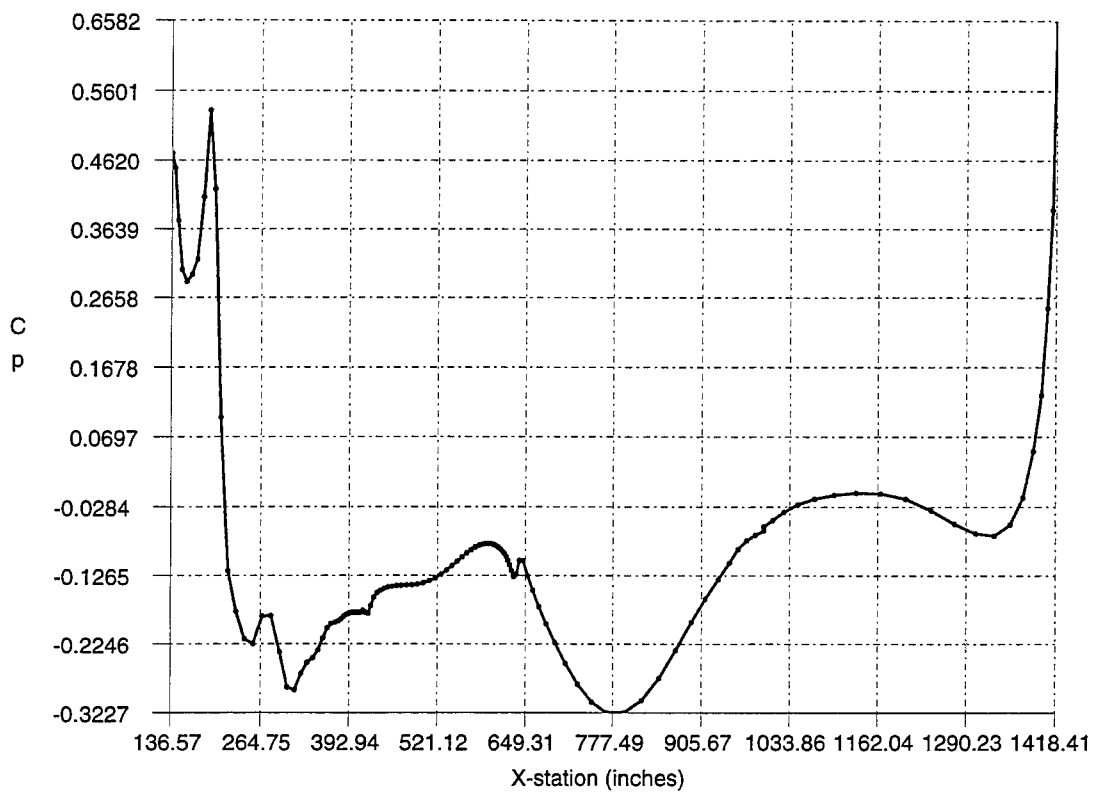


Figure 30: Cp vs. X-station (fuselage top centerline)  
(*Mach*=0.76, *Alpha*=3.0 deg, *Beta*=0.0 deg)

## Cp vs. X-station (fuselage bottom centerline)

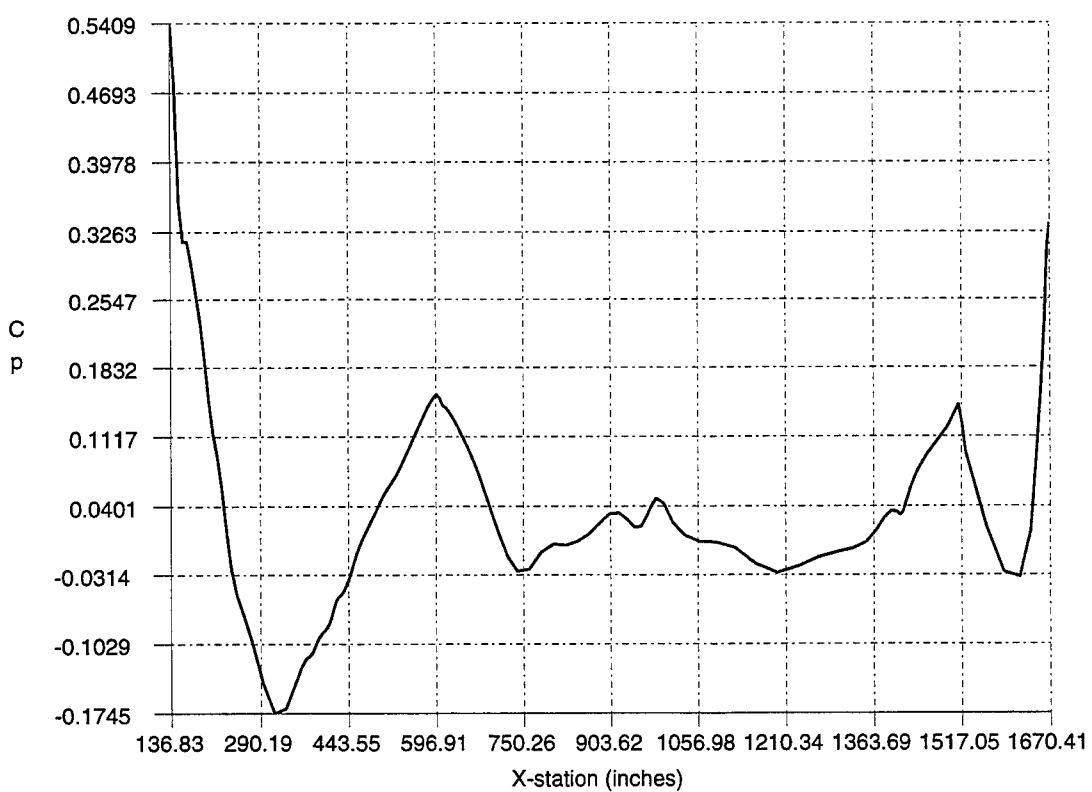


Figure 31: Cp vs. X-station (fuselage bottom centerline)

(*Mach=0.76, Alpha=3.0 deg, Beta=0.0 deg*)

## Mach Number vs. X-station (fuselage top centerline)

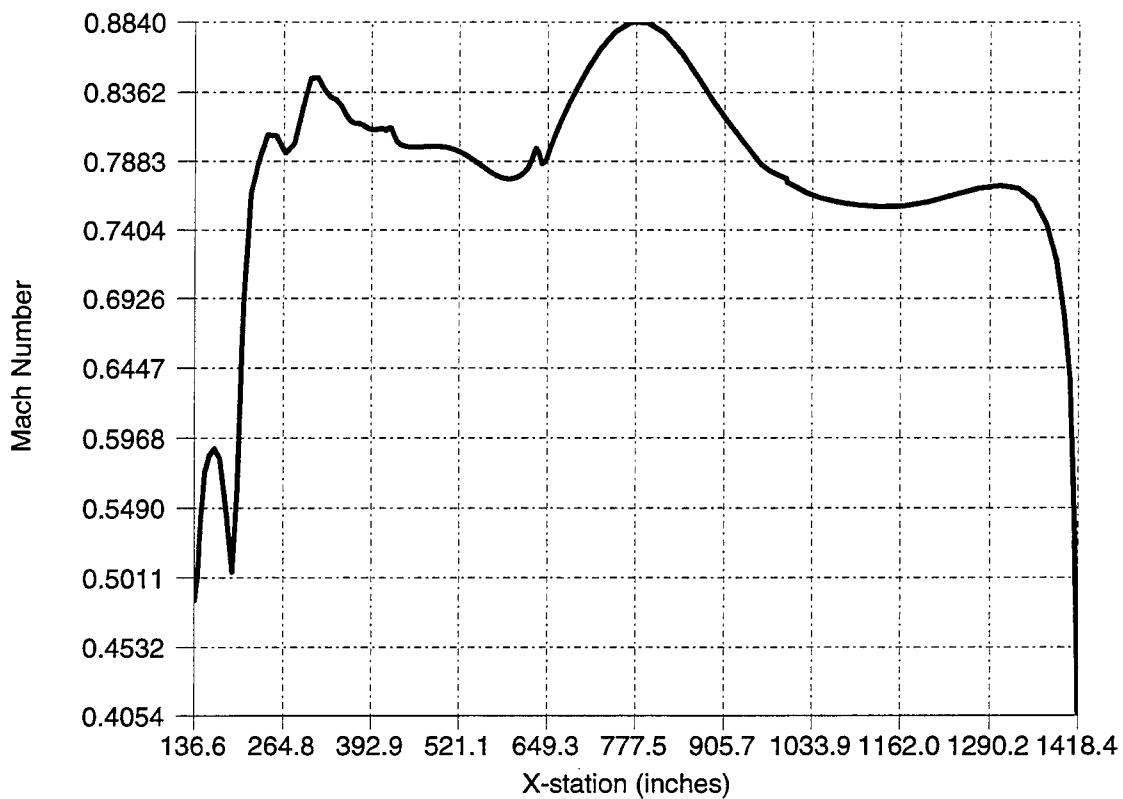


Figure 32: Mach Number vs. X-station (fuselage top centerline)

(Mach=0.76, Alpha=3.0 deg, Beta=0.0 deg)

## Mach Number vs. X-station (fuselage bottom centerline)

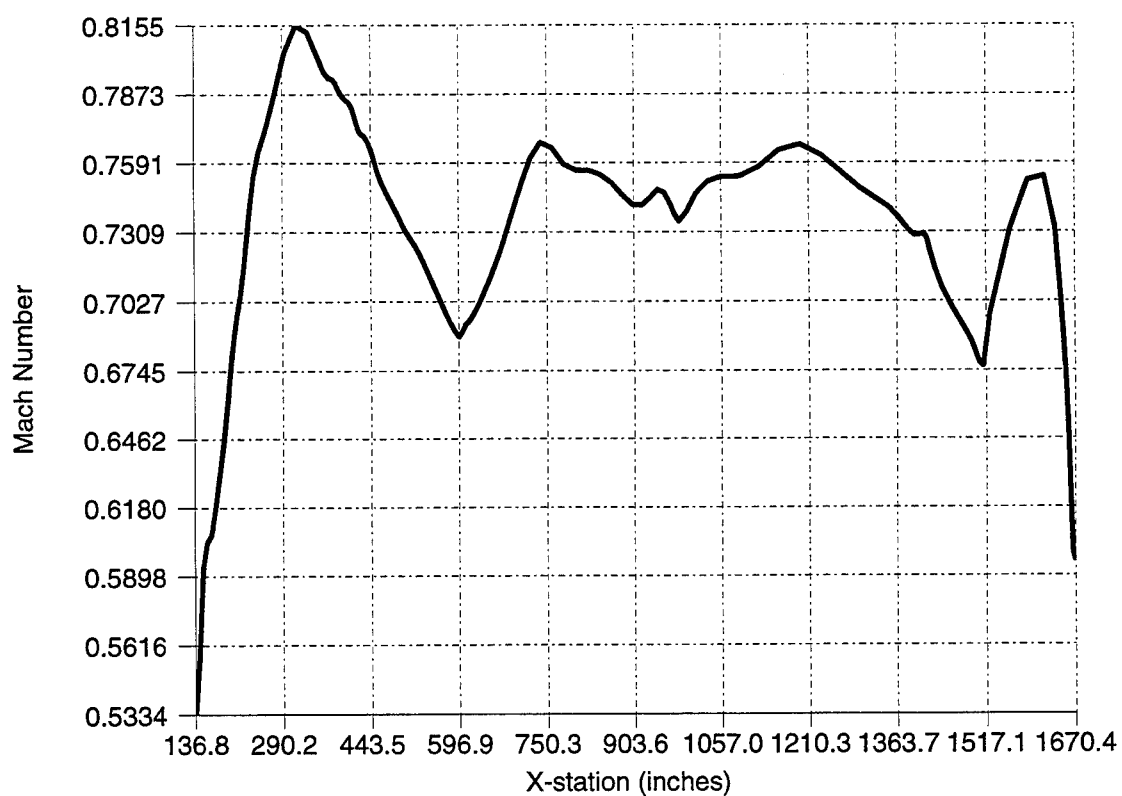


Figure 33: Mach Number vs. X-station (fuselage bottom centerline)

(*Mach*=0.76, *Alpha*=3.0 deg, *Beta*=0.0 deg)

## 6.10 Plate X-station Plots

Plots of  $C_p$  vs. X-station and Mach number vs. X-station are provided along the centerline of the plate for the Mach = 0.76 case. Figures 34 and 35 show wind tunnel results and are provided for comparison.

## Cp vs. X-station (plate top centerline)

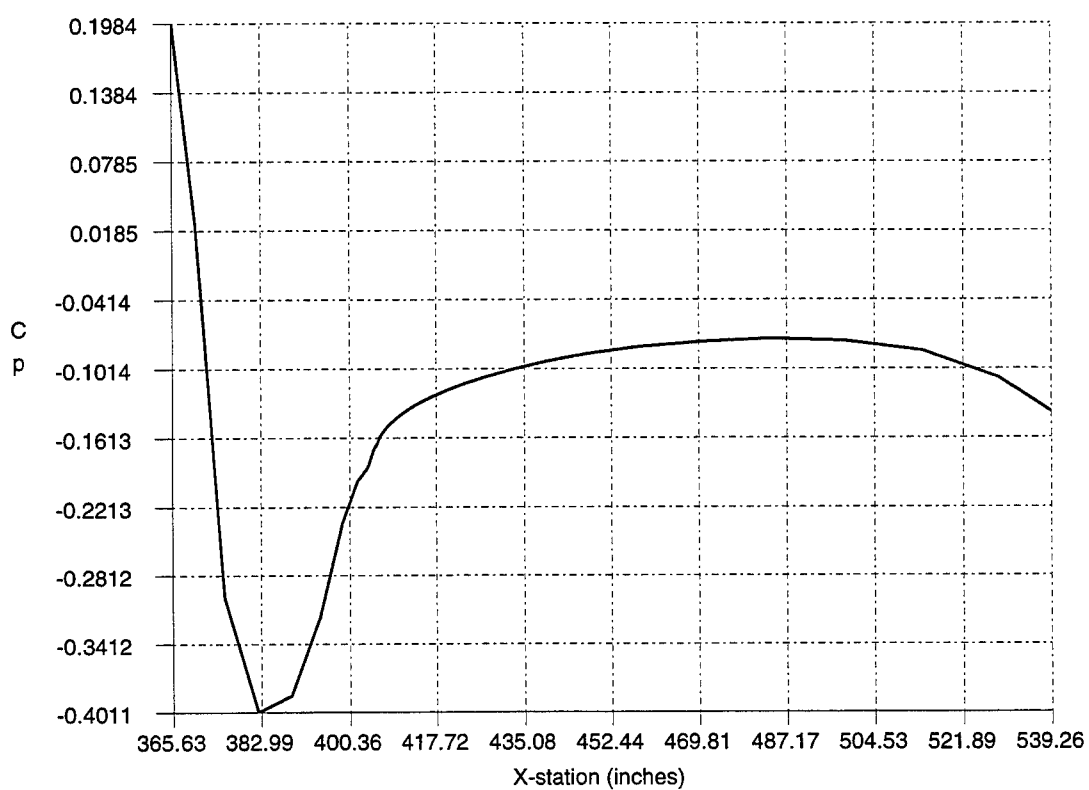


Figure 34: Cp vs. X-station (plate top centerline)

(Mach=0.76, Alpha=3.0 deg, Beta=0.0 deg)

### Mach Number vs. X-station (plate top centerline)

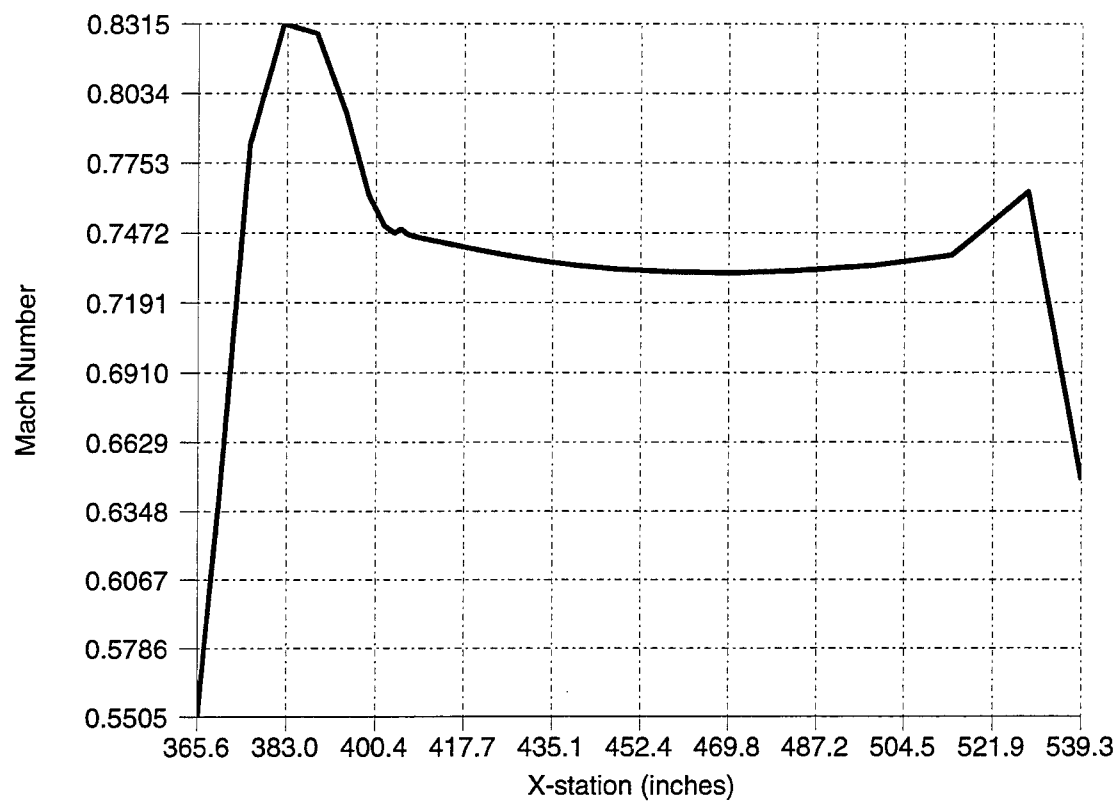


Figure 35: Mach Number vs. X-station (plate top centerline)

(*Mach=0.76, Alpha=3.0 deg, Beta=0.0 deg*)



## 6.11 Particle Trace Plot

The streamlines for the Mach = 0.76 case are plotted to illustrate the particle paths near the nose of the C-135. The position listed on the plot in Figure 36 is of interest to the ABL SPO due to an instrument probe location.

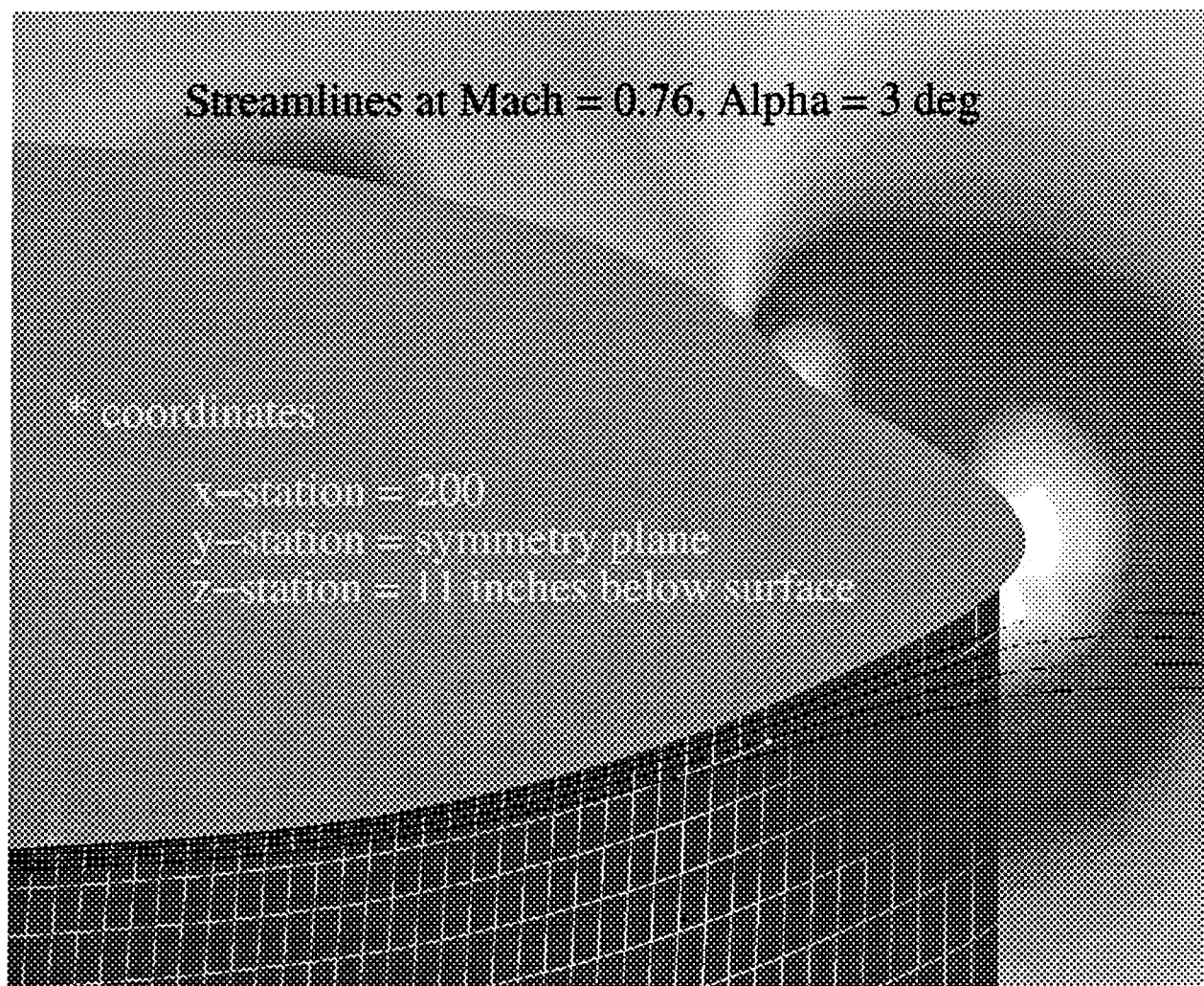


Figure 36: Streamlines under Aircraft Nose

*(Mach=0.76, Alpha=3.0 deg, Beta=0.0 deg)*

## 7. CFD Results Summary

The analysis provided here is very general in nature and is intended to bring several observations to light. More detailed analysis would require additional direction by the ABL SPO to focus on the specific requirements of the analysis. In general, gaining an understanding of specific areas of concern is best accomplished through discussion and interactive viewing of the data.

From the previously presented results, it is obvious that the plate/pylon have a significant effect on the air flow over the aircraft. The tabulated results show that the presence of the plate/pylon reduces the CL for moderate angles of attack. Although the pylon produces some lift, its influence on the right wing creates a net loss. In turn, the reduced lift on the right wing of the aircraft and the increased lift on the pylon appears to add to the nose up pitching moment, increases the negative rolling moment, and increases the positive yawing moment. The Mach number plots provided show reduced Mach number over the right wing and also shows that the right horizontal stabilizer is experiencing increased lift perhaps due to reduced downwash of the right wing. The flow over the plate and pylon can also be seen in the Mach number plots. These computations show that the pylon has significant transonic and low supersonic flow over most of its surface for cases where the freestream Mach number exceeds 0.76 and may experience mild shocks, especially at the 5.5 degree angle of attack case. The plate sees a local acceleration on the leading edge droop and of the plate and a weak shock forms for the higher freestream Mach number cases. This shock increases in strength as the Mach number increases but the location remains stationary. The flow over the pylon aft of the plate resembles a recirculation region. This flow region occurs only near the surface and may be due to the modelling of the plate thickness. The aft edge of the plate was purposefully left with a rearward facing step to fix the location of separation at the back of the plate.

Results from the Mach 0.36 case illustrate a more complex flow field, and should be viewed in a qualitative manner. The severe angles of attack and sideslip produce massive separation on the left wing and the right side of the vertical tail. This in turn produces a wake off of the plate which follows the trailing edge of the wing (see particle trace plot). Surprisingly, the flow on the outboard side of the plate does not appear to be separated. From the particle trace it appears that

the flow wraps around the nose and fuselage without separating. It is important to remember that optical data will not be taken at this flight condition. Therefore, interest in this condition is purely for control and structural purposes.

The  $C_p$  plots on the plate should be used in conjunction with the tabulated  $C_p$  data. The cases plotted all show a uniform  $C_p$  distribution in the region where the optical window is located. The tabulated  $C_p$  data was provided to the 4950 Test Wing to calculate loading on the plate and pylon. Results of their work are included in Section 9 of this report and in Reference 3.

## 8. Tunnel Test Comparison

In April 1993, a wind tunnel test was conducted on four plate/pylon configurations in the WL/FIME Trisonic Gasdynamics Facility. This facility is a closed circuit, variable density, continuous flow wind tunnel with an operating Mach number range of 0.23 to 3.0.

For the tests conducted, a freestream Mach number of 0.7 was used. The 0.1 scale plate/pylon models were mounted on the side wall of the 2-foot test section and were able to pivot to change the angle of attack (AoA). No sideslip cases (yaw angle not equal to zero) were possible due to the test setup. The main purpose of the wind tunnel test was to measure the boundary layer thickness in the optical window region. In addition to collecting boundary layer data, static pressure ports collected data on the splitter plate centerline, and tufts and oil flows were used for flow visualization. (For complete information on the wind tunnel test, the reader is directed to Reference 1.)

For purposes of comparison with the CFD analysis, the baseline plate tested in the tunnel is a scaled version of the geometry used for the CFD analysis. One must remember that the tunnel model is mounted on a flat wall while the CFD configuration has a plate/pylon mounted on a curved fuselage. An inspection of the CFD and tunnel pressure data shows consistently uniform flow in the optical window region, and similar trends in the data. Direct comparison of the pressure values is not included due to the differences in flight conditions and geometry. Inclusion of the wind tunnel data in this report is solely for a qualitative comparison of streamline data with the calculated results.

Courtesy of Dr. James Van Kuren, the following two pictures (Figures 37 and 38) are included for comparison with the CFD results. Figure 37 shows tufts attached to the outboard surface of the plate. These tufts show the uniformity of the flow on the plate. Figure 38 shows an oil flow at an angle of attack of 2.5 degrees. Of particular interest in this picture is the stalled region (indicated by the stationary oil) on the pylon aft of the plate. This region is caused by the bluntness of the plate's trailing edge, and is consistent with findings in the CFD results (see Figure 39).

Although the flow conditions are slightly different for Figures 38 and 39, the angles of the oil

flow on the plate are remarkably similar. The oil flow on the pylon in Figure 39 indicates that the flow is also stalled in the computational solution as mentioned above.

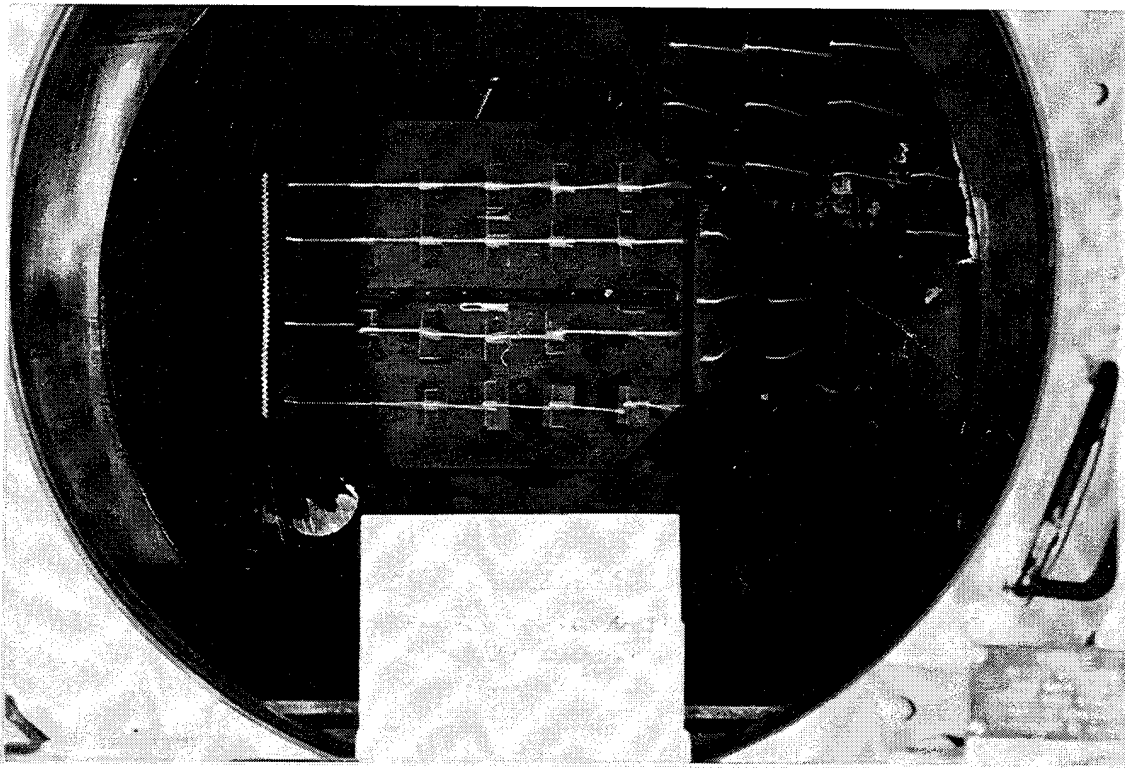


Figure 37: Tufted Splitter Plate in Tunnel

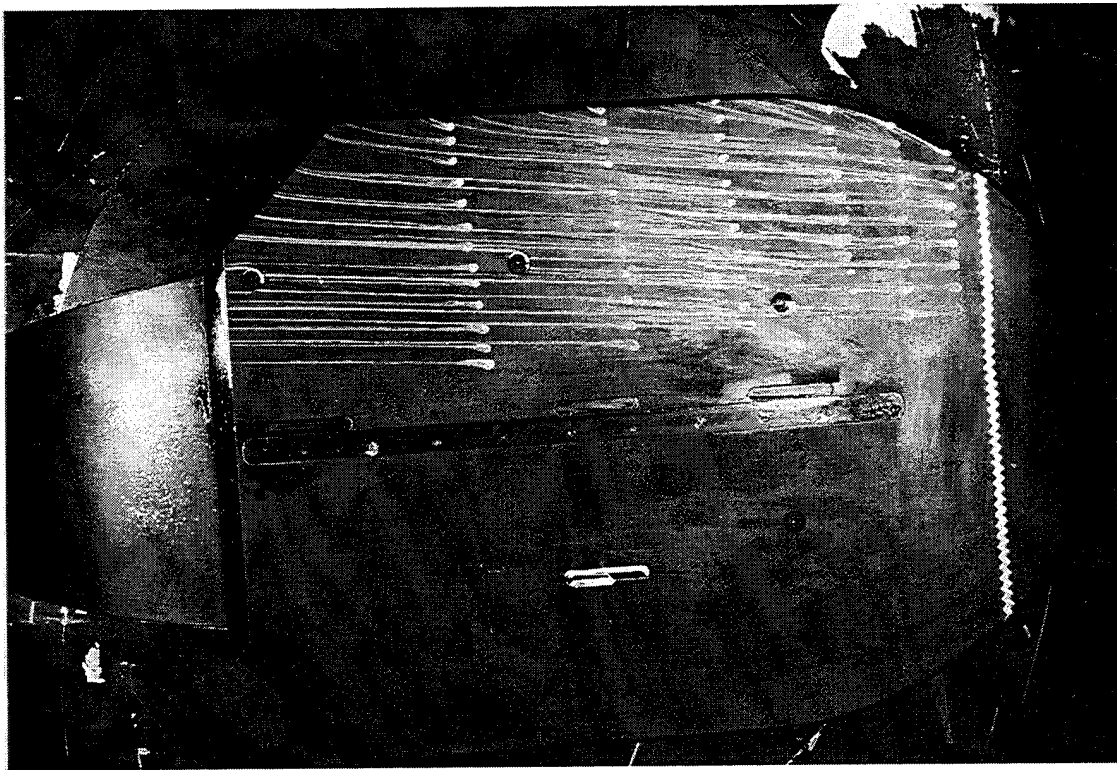
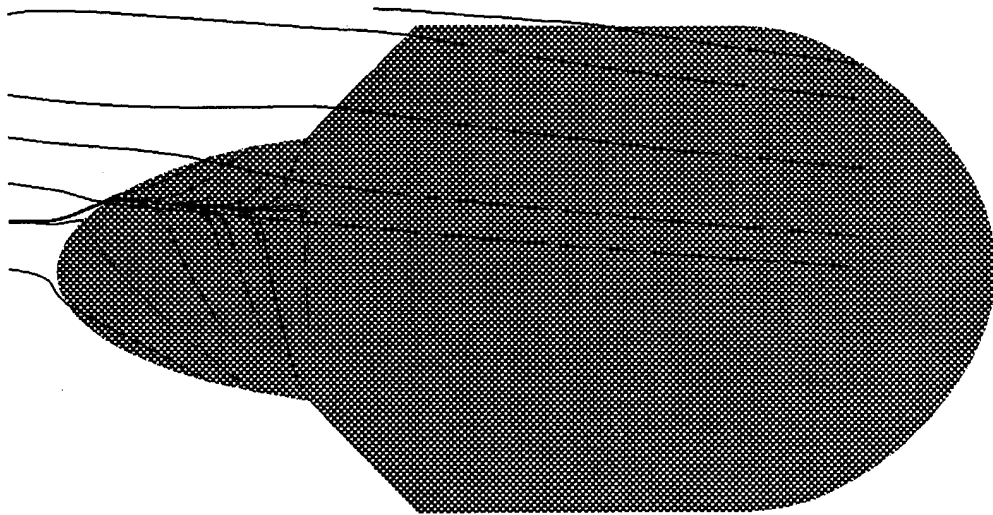


Figure 38: Splitter Plate Oil Flow in Tunnel ( $Mach=0.7$ ,  $\alpha=2.5$  deg)



$Mach = 0.76$   
 $\alpha = 3.0$  deg

Figure 39: CFD Oil Flow on Splitter Plate

## 9. Plate and Pylon Loading

From the CFD analysis performed, pressure coefficient ( $C_p$ ) data was extracted for use by the 4950 Test Wing. The Appendix contains the tabulated  $C_p$  data for the panels which make up the plate and pylon surfaces. This data was provided to the 4950 Test Wing where it was used to produce the loads and moments which act on the plate and pylon. From the  $C_p$  data, pressure loads (in lbs) were calculated on surface panels by using the definition of  $C_p$ , the area of the surface panel, and the unit normal. By summing the panels of interest, total loads and their directions were calculated. For the moment calculations, the loads were summarized around: fs 450, bl 84.5, and wl=256.

Courtesy of Mr Dave Bushroe of the 4950 Test Wing the following tables, seven through eleven, have been included to complete the results.

Table 7: Test Condition Summary

Condition	Altitude (feet)	Ve (KEAS)	Mach	Beta (deg)	Alpha (deg)	q (psf)	q (psi)
1	23800	360	0.87	-4.1	5.5	437.76	3.04
2	23800	360	0.87	-4.1	1.4	437.76	3.04
3	0	240	0.36	-14.5	14.6	191.98	1.33
4	45000	189	0.76	0.0	3.0	124.53	0.86

(KEAS = Knots Equivalent Airspeed, q = dynamic pressure)

In the following tables, eight through eleven, the first four surfaces represent the sides of the pylon, the next two represent the inboard plate surfaces, and the remaining surfaces represent the outboard plate surfaces and the top of the pylon.



Table 8: Pressures and Moments for Condition 1

Pressure and Moments on Plate and Pylon Surfaces

(Alt=23800 ft, Ve=360 keas, M=.87, Beta=-4.1 deg, Alpha=5.5 deg, q=3.04 psi)

Surface	Area	px	py	pz	mxx	myy	mzz
L A Py	751.0	10.6	0.6	-173.6	986.1	16122.5	-157.2
F Py B	2099.1	476.6	0.0	-918.3	4111.6	43926.9	4146.8
U A Py	2152.6	142.5	0.5	944.5	-18460.7	-85206.8	3061.0
F Py U	5923.6	-688.8	2.0	6469.4	-121879.8	-139361.0	-11769.4
Py Tot	10926.3	-59.1	3.1	6322.0	-135242.7	-164518.4	-4718.7
L Pl B	5231.6	-63.9	764.8	0.0	-21792.1	83.8	-160241.2
U Pl B	5224.2	48.1	-2402.5	0.0	129566.5	4002.9	-89673.2
Py T A Pl	3182.6	89.1	1020.4	0.0	-120.5	-131.7	89095.0
U Pl T	5228.7	-172.0	3110.2	-0.2	-99874.1	-4651.7	-132871.9
M Pl T	7749.1	-63.4	1814.6	0.0	-3276.5	-112.4	23616.6
L Pl T	5236.0	-207.7	3665.2	0.7	124729.6	5370.8	-176362.0
Pl Tot	31852.3	-389.8	7972.8	0.6	119293.8	4561.5	-426436.5
Totals		-448.9	7975.9	6322.6	-15948.8	-159956.9	-431155.3

(All table values have been rounded to the nearest decimal place for tabulation. For surface names the following abbreviations are used:

L=Lower, A=Aft, F=Forward, U=Upper, B=Bottom, T=Top, M=Middle, Py=Pylon, Pl=Plate)

Table 9: Pressures and Moments for Condition 2

Pressure and Moments on Plate and Pylon Surfaces

(Alt=23800 ft, Ve=360 keas, M=.87, Beta=-4.1 deg, Alpha=1.4 deg, q=3.04 psi)

Surface	Area	px	py	pz	mxx	myy	mzz
L A Py	751.0	-39.5	0.4	-57.7	150.7	4144.9	-664.5
F Py B	2099.1	140.4	0.1	1682.7	8894.7	26964.5	1983.6
U A Py	2152.6	138.0	0.5	881.8	-17411.1	-78935.8	2965.6
F Py U	5923.6	-174.7	1.7	5899.9	-114582.7	-160239.7	-5412.2
Py Tot	10926.3	84.1	2.6	5041.3	-122948.4	-206045.5	-1127.5
L Pl B	5231.6	-47.1	-888.0	0.0	-86105.8	-1666.8	-116937.4
U Pl B	5224.2	-5.9	-1313.4	0.1	99029.9	2574.7	-130833.4
Py T A Pl	3182.6	-54.6	161.8	0.0	-321.3	-28.3	3783.7
U Pl T	5228.7	-230.8	4006.2	-0.5	-129342.5	-8122.9	-181044.8
M Pl T	7749.1	-69.9	2000.9	0.0	-4021.1	-140.5	19696.6
L Pl T	5236.0	-239.7	4002.6	1.1	116673.1	5762.2	-203232.4
Pl Tot	31852.3	-648.2	7970.1	0.7	-2087.9	176.3	-608565.7
Totals		-584.1	7972.7	5041.9	-125036.3	-205867.1	-609693.2

(All table values have been rounded to the nearest decimal place for tabulation. For surface names the following abbreviations are used:

L=Lower, A=Aft, F=Forward, U=Upper, B=Bottom, T=Top, M=Middle, Py=Pylon, Pl=Plate)

Table 10: Pressures and Moments for Condition 3

Pressure and Moments on Plate and Pylon Surfaces

(Alt=0 ft, Ve=240 keas, M=.36, Beta=-14.5 deg, Alpha=14.6 deg, q=1.33 psi)

Surface	Area	px	py	pz	mxx	myy	mzz
L A Py	751.0	141.3	1.0	-438.8	2868.8	43175.3	1238.4
F Py B	2099.1	269.4	-0.2	-168.5	367.6	29746.9	1967.7
U A Py	2152.6	320.4	0.7	1026.0	-19259.9	-100850.3	6002.8
F Py U	5923.6	-397.6	0.9	2991.6	-56019.3	-74356.1	-5357.8
Py Tot	10926.3	333.4	3.4	3410.3	-72042.7	-102284.1	3851.1
L Pl B	5231.6	-114.6	2398.1	0.0	77212.4	3272.0	-97166.6
U Pl B	5224.2	-53.0	-622.0	0.0	47528.9	524.1	-70578.4
Py T A Pl	3182.6	501.4	2918.7	0.1	-3819.3	587.4	291952.4
U Pl T	5228.7	-101.5	1581.5	-0.1	-52008.6	-2576.5	-59949.4
M Pl T	7749.1	-75.0	2146.9	0.0	2237.3	78.0	47561.0
L Pl T	5236.0	-188.0	3392.0	-0.4	129446.1	5634.8	-95113.7
Pl Tot	31852.3	-30.7	11815.1	-0.3	200596.7	7519.8	16705.3
Totals		302.8	11817.5	3410.0	128554.0	-94764.3	20556.3

(All table values have been rounded to the nearest decimal place for tabulation. For surface names the following abbreviations are used:  
L=Lower, A=Aft, F=Forward, U=Upper, B=Bottom, T=Top, M=Middle, Py=Pylon,  
Pl=Plate)

Table 11: Pressures and Moments for Condition 4

Pressure and Moments on Plate and Pylon Surfaces

(Alt=45000 ft, Ve=189 keas, M=.76, Beta=0 deg, Alpha=3 deg, q=.865 psi)

Surface	Area	px	py	pz	mxx	myy	mzz
L A Py	751.0	9.3	0.3	-67.7	401.8	6416.9	9.6
F Py B	2099.1	107.6	0.0	-344.8	1667.3	12592.0	1004.9
U A Py	2152.6	72.7	0.2	372.4	-7079.2	-34332.9	1447.3
F Py U	5923.6	-222.0	0.7	2067.4	-39330.3	-46416.4	-3732.3
Py Tot	10926.3	-32.5	1.1	2027.3	-44340.5	-61740.4	-1270.5
L Pl B	5231.6	-6.8	-60.2	0.0	-14467.5	-376.0	-34105.1
U Pl B	5224.2	34.0	-956.7	0.0	45337.2	1640.6	-8762.0
Py T A Pl	3182.6	53.1	424.4	0.0	39.6	-16.7	39477.6
U Pl T	5228.7	-36.7	732.4	0.0	-25268.1	-1086.0	-22039.4
M Pl T	7749.1	-21.8	625.0	0.0	-1415.3	-49.4	12333.8
L Pl T	5236.0	-45.8	780.5	0.0	24342.9	1173.9	-35501.8
Pl Tot	31852.3	-24.0	1545.5	0.0	28568.7	1286.4	-48596.8
Totals		-56.5	1546.6	2027.3	-15771.8	-60454.0	-49867.3

(All table values have been rounded to the nearest decimal place for tabulation. For surface names the following abbreviations are used:

L=Lower, A=Aft, F=Forward, U=Upper, B=Bottom, T=Top, M=Middle, Py=Pylon, Pl=Plate)

## 10. References

- [1] Van Kuren, James T. "ABL AACT Splitter Plate, 0.1 Scale Wind Tunnel Test," April 1993
- [2] Emsley H. T. "I3G/VIRGO, Interactive Graphics for Geometry Generation and Visual Interactive Rapid Grid Generation, User's Manual," WL-TM-91- 316.
- [3] Emsley H. T. "PLUTO 3-D Grid Generator, User's Manual," WL-TM-91-312.
- [4] Strang W. Z. "Mercury User's Manual," AFWAL-TM-88-217.
- [5] Boeing Company "External Internal Loads for the C-135 Airplane," D6-7267, April 1961.

## Appendix

(Cp data on plate and pylon surfaces)

THIS TABULATED DATA PROVIDES THE PRESSURE COEFFICIENT DATA OF ALL PANELS ON  
THE PLATE AND PYLON SURFACES

X,Y,Z : THE CENTROID COORDINATE LOCATION OF THE PANEL  
AREA : THE SURFACE AREA OF THE PANEL  
EX,EY,EZ: THE UNIT NORMAL COMPONENTS  
CP1 : PRESSURE COEFFICIENT AT (MACH = 0.76, ALPHA = 3.0, BETA = 0.0)  
CP2 : PRESSURE COEFFICIENT AT (MACH = 0.87, ALPHA = 5.5, BETA = -4.1)  
CP3 : PRESSURE COEFFICIENT AT (MACH = 0.36, ALPHA = 14.6, BETA = -14.5)  
CP4 : PRESSURE COEFFICIENT AT (MACH = 0.87, ALPHA = 1.4, BETA = -4.1)

pylon aft lower

X	Y	Z	AREA	EX	EY	EZ	CP1	CP2	CP3	CP4
549.2980	73.2220	226.0274	35.7519	0.1701	0.0036	-0.9854	-0.13760	-0.11164	-0.47665	-0.07741
561.0918	73.0427	228.4106	25.9181	0.2308	0.0030	-0.9730	-0.11435	-0.08551	-0.51197	-0.03390
570.8676	72.8062	231.0316	17.4671	0.2929	0.0033	-0.9561	-0.13280	-0.10461	-0.58486	-0.02849
578.7389	72.5117	233.7019	11.2953	0.3560	0.0045	-0.9345	-0.14832	-0.12010	-0.61202	-0.02649
584.9449	72.1625	236.2983	7.1759	0.4232	0.0067	-0.9060	-0.17133	-0.14067	-0.68801	-0.04235
589.7532	71.7545	238.7618	4.8951	0.4971	0.0081	-0.8726	-0.20098	-0.15698	-0.75304	-0.06636
593.4294	71.3053	241.0666	2.9851	0.5773	0.0093	-0.8200	-0.16791	-0.11488	-0.82955	-0.04762
596.2608	70.8052	243.1399	2.0235	0.6138	-0.0080	-0.7894	-0.05632	-0.00424	-0.26954	0.03687
598.4449	70.4052	245.0032	1.4305	0.6887	-0.0020	-0.7250	-0.04044	0.02026	-0.31898	0.04391
600.1243	69.9676	246.6871	1.0589	0.7298	-0.0035	-0.6836	0.05471	0.10334	-0.19713	0.12073
601.4092	69.5443	248.2119	0.8243	0.8034	0.0054	-0.5954	0.07480	0.11855	-0.24210	0.14594
602.3622	69.1348	249.6212	0.6764	0.8566	0.0030	-0.5159	0.14987	0.18381	-0.20520	0.22408
603.0971	68.7460	250.9017	0.5839	0.8791	-0.0027	-0.4767	0.23886	0.25898	-0.10858	0.32611
603.6568	68.3764	252.0695	0.5164	0.9249	0.0035	-0.3802	0.24126	0.25747	-0.17681	0.36873
604.0432	68.0232	253.1499	0.4737	0.9584	-0.0020	-0.2854	0.31458	0.32013	-0.20988	0.47840
604.3008	67.6879	254.1459	0.4460	0.9776	-0.0002	-0.2106	0.42926	0.42241	-0.24118	0.63172
604.4716	67.3707	255.0598	0.4273	0.9880	-0.0014	-0.1544	0.52927	0.51235	-0.26345	0.75947
604.5837	67.0707	255.8982	0.4122	0.9939	-0.0017	-0.1099	0.65978	0.53291	-0.32021	0.87551
604.6553	66.7896	256.6613	0.3913	0.9971	-0.0020	-0.0763	0.80078	0.56992	-0.33589	0.91372
548.7166	75.9146	235.9369	3.43594	0.1873	0.0030	-0.9859	-0.14295	-0.11611	-0.47262	-0.08507
560.6749	75.3414	238.9488	2.49538	0.2285	0.0025	-0.9735	-0.11423	-0.08528	-0.50479	-0.03658
570.5601	74.6850	242.9488	1.68586	0.2909	0.0029	-0.9568	-0.12477	-0.09685	-0.56894	-0.02477
578.4998	74.0133	246.6179	1.09303	0.3542	0.0041	-0.9351	-0.13419	-0.10702	-0.59163	-0.01579
584.5888	73.3150	249.2155	0.9624	0.4212	0.0063	-0.9070	-0.15584	-0.12359	-0.66820	-0.02670
589.5888	72.5108	251.6754	0.4472	0.4940	0.0074	-0.8694	-0.17701	-0.13635	-0.50725	-0.04625
593.2883	72.0892	254.9688	2.9135	0.5675	0.0026	-0.8234	-0.15299	-0.10310	-0.41676	-0.03433
596.1404	71.5121	243.0397	1.9824	0.6108	-0.0088	-0.7917	-0.04815	0.00142	-0.25971	0.04474
598.3411	70.9772	244.9029	1.4073	0.6854	-0.0032	-0.7281	-0.02971	0.02889	-0.29970	0.05351
600.0352	70.4806	246.5893	1.0461	0.7276	-0.0044	-0.6859	0.06038	0.10857	-0.18485	0.12505
601.3358	70.0194	248.1172	0.8187	0.7986	0.0034	-0.6018	0.08209	0.12551	-0.21792	0.14928
602.3061	69.5898	249.5307	0.6757	0.8531	0.0014	-0.5218	0.14616	0.18128	-0.19670	0.21571
603.0540	69.1931	250.8198	0.5857	0.8777	-0.0031	-0.4791	0.23886	0.26041	-0.09440	0.31871
603.6255	68.8240	251.9975	0.5201	0.9219	0.0022	-0.3874	0.24877	0.26583	-0.13301	0.36821
604.0240	68.4797	253.0887	0.4792	0.9566	0.0010	-0.2915	0.30662	0.31458	-0.15437	0.45079
604.2904	68.1611	254.0974	0.4524	0.9767	-0.0006	-0.2147	0.40862	0.40378	-0.28256	0.58982
604.4664	67.8652	255.0248	0.4341	0.9877	-0.0015	-0.1515	0.48297	0.48227	-0.30330	0.71628
604.5823	67.5889	255.8765	0.4191	0.9938	-0.0019	-0.1112	0.60857	0.58352	-0.34149	0.84093
604.6557	67.3322	256.6572	0.3983	0.9971	-0.0020	-0.0766	0.72823	0.70661	-0.36206	0.89922
548.1749	78.5028	235.6526	31.5272	0.1646	0.0023	-0.9864	-0.13357	-0.10722	-0.46163	-0.07537
560.2830	77.8028	238.2325	23.0916	0.2263	0.0021	-0.9741	-0.10650	-0.07826	-0.49834	-0.02875
570.2714	77.4665	240.8606	15.7337	0.2890	0.0026	-0.9573	-0.12187	-0.09395	-0.56417	-0.02185
578.2714	75.4481	243.5377	10.2819	0.3525	0.0038	-0.9358	-0.13004	-0.10287	-0.58278	-0.01211
584.5598	74.5022	246.1357	6.5965	0.4192	0.0059	-0.9079	-0.14857	-0.11679	-0.55868	-0.02067
589.4258	73.6361	248.5918	4.2424	0.4910	0.0067	-0.8711	-0.16738	-0.12767	-0.49884	-0.03837
593.1512	73.8510	240.8766	2.7967	0.5627	-0.0012	-0.8267	-0.14425	-0.09577	-0.41134	-0.02702
596.0227	72.1556	242.9417	1.9148	0.6079	-0.0098	-0.7940	-0.04514	0.00337	-0.26331	0.04751
598.2391	71.5378	244.8046	1.3682	0.6822	-0.0043	-0.7312	-0.02510	0.03206	-0.29813	0.05774
599.9475	70.9849	246.4931	1.0233	0.7255	-0.0051	-0.6882	0.06124	0.10871	-0.19063	0.12673
601.2635	70.4877	248.0239	0.8063	0.7939	0.0014	-0.6080	0.08489	0.12752	-0.21658	0.21171
602.2507	70.0393	249.4413	0.6704	0.8495	-0.0003	-0.5275	0.14157	0.17665	-0.20129	0.30818
603.0113	69.6359	250.7386	0.5842	0.8764	-0.0038	-0.4816	0.23026	0.25268	-0.10139	0.35203
603.5945	69.2680	251.9261	0.5213	0.9190	0.0002	-0.3943	0.24595	0.26390	-0.11727	0.43563
604.0049	68.9334	253.0279	0.4828	0.9547	0.0002	-0.2974	0.29898	0.30866	-0.12157	0.53350
604.2800	68.6321	254.0491	0.4575	0.9738	-0.0009	-0.2186	0.39396	0.39191	-0.24329	0.56379
604.4619	68.3582	254.9898	0.4401	0.9873	-0.0015	-0.1586	0.47113	0.46265	-0.26357	0.68268
604.5817	68.1062	255.8548	0.4255	0.9937	-0.0017	-0.1124	0.56779	0.54623	-0.27559	0.80511
604.6561	67.8745	256.6432	0.4050	0.9970	-0.0019	-0.0769	0.66376	0.64230	-0.24959	0.88115
547.6918	80.6647	225.7772	27.7534	0.1623	0.0018	-0.9867	-0.15242	-0.12236	-0.48303	-0.09535
559.9279	79.4629	228.1541	20.6568	0.2244	0.0017	-0.9745	-0.11363	-0.08422	-0.50701	-0.03782
570.0002	78.1053	230.7839	14.2862	0.2872	0.0022	-0.9579	-0.12050	-0.09212	-0.55569	-0.02209
578.0586	76.7847	233.4629	9.4597	0.3509	0.0035	-0.9364	-0.12222	-0.09505	-0.56444	-0.00644
584.3820	75.5828	236.0605	6.1385	0.4173	0.0055	-0.9087	-0.13379	-0.10326	-0.53682	-0.00930
589.2727	74.5159	238.5122	3.9882	0.4881	0.0060	-0.8728	-0.14656	-0.10932	-0.47570	-0.02205
593.0198	73.5812	240.7882	2.6525	0.5581	0.0000	-0.8298	-0.12504	-0.07982	-0.39207	-0.01188
595.9092	72.7764	242.8472	1.8314	0.6050	-0.0106	-0.7962	-0.03368	0.01205	-0.25197	0.06916
598.1404	72.0818	244.7091	1.3193	0.6790	-0.0059	-0.7341	-0.01060	0.04364	-0.21751	0.13350
599.8619	71.4766	246.3993	0.9941	0.7397	-0.0004	-0.6904	0.07140	0.11725	-0.17308	0.15928
601.1927	70.9462	247.9325	0.7837	0.7893	-0.0018	-0.5330	0.09724	0.13841	-0.18815	0.21221
602.1962	70.4610	249.3534	0.6818	0.8461	-0.0045	-0.4840	0.14774	0.18250	-0.18048	0.25347
602.9693	70.0723	250.6586	0.5804	0.8750	-0.0005	-0.4009	0.23822	0.26081	-0.08236	0.30706
603.6626	69.7069	251.8555	0.5208	0.9161	-0.0005	-0.3324	0.26324	0.28092	-0.07164	0.35347
603.9861	69.3830	252.9676	0.4853	0.9530	-0.0006	-0.3030	0.30949	0.31993	-0.05161	0.42319
604.2698	69.1000	254.0011	0.4617	0.9750	-0.0015	-0.2224	0.39577	0.39504	-0.15011	0.53226
604.4571	68.8490	254.9551	0.4454	0.9870	-0.0018	-0.1607	0.46126	0.45444	-0.16187	0.63471
604.5793	68.6222	255.8332	0.4316	0.9935	-0.0020	-0.1136	0.53220	0.51361	-0.18728	0.74803
604.6564	68.4163	256.6343	0.4115	0.9970	-0.0020	-0.0772	0.58818	0.56394	-0.19807	0.84030
547.2765	82.5927	225.7122	23.5943	0.1603	0.0012	-0.9871	-0.13149	-0.10294	-0.44139	-0.07244
559.6154	81.1885	228.0851	18.0015	0.2227	0.0013	-0.9749	-0.10213	-0.07359	-0.49025	-0.02593
569.7594	79.5779	230.7150	12.7216	0.2856	0.0019	-0.9583	-0.11487	-0.08645	-0.54553	-0.01650

577.8640	78.0073	233.3944	8.5783	0.3495	0.0032	-0.9369	-0.11442	-0.08741	-0.54858	0.00068
584.2168	76.5860	235.9908	5.6509	0.4156	0.0051	-0.9096	-0.12194	-0.09219	-0.52156	0.00079
589.1287	75.3429	238.4373	3.7187	0.4854	0.0053	-0.8743	-0.13244	-0.09664	-0.52156	-0.01037
592.8949	74.2745	240.7043	2.5001	0.5536	-0.0012	-0.8328	-0.11290	-0.06989	-0.38957	-0.00156
595.8005	73.3709	242.7566	1.7431	0.6022	-0.0115	-0.7983	-0.02998	-0.01387	-0.26318	-0.06026
598.0450	72.6065	244.6171	1.2673	0.6759	-0.0066	-0.7369	-0.00809	0.04402	-0.28544	0.07238
599.7791	71.9536	246.3083	0.9628	0.7213	-0.0068	-0.6926	0.06722	0.11213	-0.19413	0.13145
601.1237	71.3933	247.8434	0.7714	0.7848	-0.0024	-0.6198	0.09251	0.13307	-0.20331	0.15656
602.1430	70.9136	249.2674	0.6521	0.8427	-0.0033	-0.5383	0.12978	0.16523	-0.20193	0.19832
602.9280	70.5013	250.5800	0.5755	0.8738	-0.0049	-0.4862	0.21088	0.23611	-0.10551	0.28452
603.5336	70.1399	251.7859	0.5196	0.9133	-0.0017	-0.4073	0.24370	0.26453	-0.06111	0.33605
603.9674	69.8278	252.9080	0.4871	0.9512	-0.0015	-0.3085	0.28876	0.30342	-0.00095	0.40071
604.2596	69.5641	253.9536	0.4654	0.9741	-0.0019	-0.2260	0.37214	0.37606	-0.04504	0.49853
604.4524	69.3371	254.9205	0.4505	0.9867	-0.0019	-0.1626	0.43472	0.43254	-0.49712	0.58429
604.5778	69.1366	255.8117	0.4375	0.9934	-0.0019	-0.1147	0.49885	0.48701	-0.79529	0.67910
604.6568	68.9576	256.6253	0.4180	0.9970	-0.0020	-0.0774	0.51296	0.49824	-0.98823	0.76211
604.7024	68.8024	257.3673	0.4186	0.9970	-0.0007	-0.0773	0.51296	0.49824	-0.98823	0.76211
604.7255	68.6755	258.0255	0.4186	0.9970	-0.0009	-0.0773	0.51296	0.49824	-0.98823	0.76211
604.7462	68.5814	258.6539	0.4186	0.9970	-0.0015	-0.0773	0.51296	0.49824	-0.98823	0.76211
604.7677	68.5136	259.2524	0.4186	0.9970	-0.0029	-0.0773	0.51296	0.49824	-0.98823	0.76211
604.7891	68.4604	259.8263	0.4186	0.9970	-0.0047	-0.0773	0.51296	0.49824	-0.98823	0.76211
604.8104	68.4216	260.3773	0.4186	0.9970	-0.0066	-0.0773	0.51296	0.49824	-0.98823	0.76211
604.8317	68.3986	260.9064	0.4186	0.9970	-0.0085	-0.0773	0.51296	0.49824	-0.98823	0.76211
604.8529	68.3814	261.4149	0.4186	0.9970	-0.0104	-0.0773	0.51296	0.49824	-0.98823	0.76211
604.8741	68.3699	261.9024	0.4186	0.9970	-0.0124	-0.0773	0.51296	0.49824	-0.98823	0.76211
604.8953	68.3637	262.3699	0.4186	0.9970	-0.0144	-0.0773	0.51296	0.49824	-0.98823	0.76211
604.9165	68.3628	262.8174	0.4186	0.9970	-0.0164	-0.0773	0.51296	0.49824	-0.98823	0.76211
604.9377	68.3673	263.2449	0.4186	0.9970	-0.0184	-0.0773	0.51296	0.49824	-0.98823	0.76211
604.9589	68.3761	263.6524	0.4186	0.9970	-0.0204	-0.0773	0.51296	0.49824	-0.98823	0.76211
604.9801	68.3893	264.0400	0.4186	0.9970	-0.0224	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.0013	68.4078	264.4075	0.4186	0.9970	-0.0244	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.0225	68.4314	264.7550	0.4186	0.9970	-0.0264	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.0437	68.4604	265.0825	0.4186	0.9970	-0.0284	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.0649	68.4949	265.3900	0.4186	0.9970	-0.0304	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.0861	68.5349	265.6775	0.4186	0.9970	-0.0324	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.1073	68.5804	265.9450	0.4186	0.9970	-0.0344	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.1285	68.6314	266.1925	0.4186	0.9970	-0.0364	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.1497	68.6879	266.4200	0.4186	0.9970	-0.0384	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.1709	68.7499	266.6275	0.4186	0.9970	-0.0404	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.1921	68.8174	266.8150	0.4186	0.9970	-0.0424	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.2133	68.8904	266.9825	0.4186	0.9970	-0.0444	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.2345	68.9689	267.1300	0.4186	0.9970	-0.0464	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.2557	69.0529	267.2575	0.4186	0.9970	-0.0484	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.2769	69.1424	267.3650	0.4186	0.9970	-0.0504	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.2981	69.2374	267.4525	0.4186	0.9970	-0.0524	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.3193	69.3379	267.5200	0.4186	0.9970	-0.0544	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.3405	69.4439	267.5675	0.4186	0.9970	-0.0564	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.3617	69.5564	267.5950	0.4186	0.9970	-0.0584	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.3829	69.6749	267.6025	0.4186	0.9970	-0.0604	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.4041	69.7994	267.5900	0.4186	0.9970	-0.0624	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.4253	69.9299	267.5575	0.4186	0.9970	-0.0644	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.4465	70.0664	267.5050	0.4186	0.9970	-0.0664	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.4677	70.2089	267.4325	0.4186	0.9970	-0.0684	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.4889	70.3574	267.3400	0.4186	0.9970	-0.0704	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.5101	70.5119	267.2275	0.4186	0.9970	-0.0724	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.5313	70.6724	267.0950	0.4186	0.9970	-0.0744	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.5525	70.8389	266.9425	0.4186	0.9970	-0.0764	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.5737	71.0114	266.7700	0.4186	0.9970	-0.0784	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.5949	71.1899	266.5775	0.4186	0.9970	-0.0804	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.6161	71.3744	266.3650	0.4186	0.9970	-0.0824	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.6373	71.5649	266.1325	0.4186	0.9970	-0.0844	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.6585	71.7614	265.8800	0.4186	0.9970	-0.0864	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.6797	71.9639	265.6075	0.4186	0.9970	-0.0884	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.7009	72.1724	265.3150	0.4186	0.9970	-0.0904	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.7221	72.3869	265.0025	0.4186	0.9970	-0.0924	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.7433	72.6074	264.6700	0.4186	0.9970	-0.0944	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.7645	72.8339	264.3175	0.4186	0.9970	-0.0964	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.7857	73.0664	263.9450	0.4186	0.9970	-0.0984	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.8069	73.3059	263.5525	0.4186	0.9970	-0.1004	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.8281	73.5514	263.1400	0.4186	0.9970	-0.1024	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.8493	73.8029	262.7075	0.4186	0.9970	-0.1044	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.8705	74.0604	262.2550	0.4186	0.9970	-0.1064	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.8917	74.3249	261.7825	0.4186	0.9970	-0.1084	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.9129	74.5964	261.2900	0.4186	0.9970	-0.1104	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.9341	74.8749	260.7775	0.4186	0.9970	-0.1124	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.9553	75.1594	260.2450	0.4186	0.9970	-0.1144	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.9765	75.4509	259.6925	0.4186	0.9970	-0.1164	-0.0773	0.51296	0.49824	-0.98823	0.76211
605.9977	75.7494	259.1200	0.4186	0.9970	-0.1184	-0.0773	0.51296	0.49824	-0.98823	0.76211
606.0189	76.0549	258.5275	0.4186	0.9970	-0.1204	-0.0773	0.51296	0.49824	-0.98823	0.76211
606.0401	76.3674	257.9150	0.4186	0.9970	-0.1224	-0.0773	0.51296	0.49824	-0.98823	0.76211
606.0613	76.6869	257.2825	0.4186	0.9970	-0.1244	-0.0773	0.51296	0.49824	-0.98823	0.76211
606.0825	77.0134	256.6300	0.4186	0.9970	-0.1264	-0.0773	0.51296	0.49824	-0.98823	0.76211
606.1037	77.3469	255.9575	0.4186	0.9970	-0.1284	-0.0773	0.51296	0.49824	-0.98823	0.76211
606.1249	77.6874	255.2650	0.4186	0.9970	-0.1304	-0.0773	0.51296	0.49824	-0.98823	0.76211
606.1461	78.0349	254.5525	0.4186	0.9970	-0.1324	-0.0773	0.51296	0.49824	-0.98823	0.76211
606.1673	78.3884	253.8200	0.4186	0.9970	-0.1344	-0.0773	0.51296	0.49824	-0.98823	0.76211
606.1885	78.7489	253.0675	0.4186	0.9970	-0.1364	-0.0773	0.51296	0.49824	-0.98823	0.76211
606.2097	79.1164	252.2950	0.4186	0.9970	-0.1384	-0.0773	0.51296	0.49824	-0.98823	0.76211
606.2309	79.4909	251.5025	0.4186	0.9970	-0.1404	-0.0773	0.51296	0.49824	-0.98823	0.76211
606.2521	79.8724	250.6900	0.4186	0.9970	-0.1424	-0.0773	0.51296	0.49824	-0.98823	0.76211
606.2733	80.2609	249.8575	0.4186	0.9970	-0.1444	-0.0773	0.51296	0.49824	-0.98823	0.76211
606.2945	80.6564	249.0050	0.4186	0.9970						



# pylon aft upper

X	Y	Z	AREA	EX	EY	EZ	CP1	CP2	CP3	CP4
550.1262	48.3762	287.8208	134.2319	0.1717	0.0014	0.9852	-0.30816	-0.25794	-0.43759	-0.25431
551.9843	50.4717	285.3651	92.8888	0.2388	0.0017	0.9711	-0.27718	-0.22041	-0.45447	-0.21134
552.6135	52.6135	283.9913	61.4416	0.2966	0.0010	0.9550	-0.22829	-0.16922	-0.42744	-0.15505
553.4788	54.7888	277.3716	39.9484	0.3658	0.0018	0.9307	-0.19732	-0.13692	-0.43130	-0.11874
554.2582	56.2582	274.9465	25.6020	0.4331	0.0016	0.9013	-0.13264	-0.07718	-0.39871	-0.05570
555.2199	57.8192	272.7315	16.5738	0.4939	0.0014	0.8695	-0.06057	-0.01227	-0.36090	-0.00958
556.1648	59.1648	270.7218	10.8728	0.5654	0.0029	0.8248	-0.01973	-0.02374	-0.37693	-0.04253
557.3196	60.3196	268.9070	7.3353	0.6243	0.0023	0.7812	0.05112	0.08589	-0.32422	-0.10090
558.6110	61.3148	267.2740	5.0504	0.6919	0.0036	0.7220	0.09611	0.12892	-0.32833	-0.13801
559.2133	62.1788	265.7932	3.5747	0.7372	0.0033	0.6757	0.16866	0.19697	-0.24312	-0.19862
560.4419	62.9275	264.4283	2.5984	0.8033	0.0049	0.5956	0.18386	0.21530	-0.24466	-0.20207
561.3665	63.5852	263.1778	1.9398	0.8525	0.0038	0.5227	0.22415	0.25664	-0.18414	-0.22293
562.0811	64.1591	262.0277	1.4914	0.8837	0.0027	0.4680	0.28305	0.31624	-0.08194	-0.25193
563.6299	64.6628	260.9594	1.1617	0.9209	0.0027	0.3899	0.32533	0.36132	-0.00659	-0.24847
564.0213	65.1140	259.9655	0.9255	0.9558	0.0022	0.2940	0.39728	0.43023	0.08741	-0.25811
564.2849	65.5210	259.0447	0.7513	0.9764	0.0010	0.2158	0.53097	0.54998	0.24199	-0.26294
564.4611	65.8870	258.1926	0.6206	0.9875	0.0000	0.1578	0.67211	0.67378	0.44402	-0.42260
564.5779	66.2162	257.4041	0.5193	0.9930	-0.0007	0.1114	0.82711	0.80740	0.60234	-0.65059
564.6533	66.5128	256.9753	0.4399	0.9970	-0.0012	0.0768	0.86056	0.84224	0.72148	-0.79777
549.1623	57.9387	287.9753	12.0834	0.1676	0.0010	0.9832	-0.27132	-0.22981	-0.40972	-0.26745
549.2583	58.2583	285.5306	8.1802	0.2341	0.0013	0.9722	-0.25405	-0.22981	-0.42294	-0.22039
551.1559	59.7499	283.8549	5.7849	0.2931	0.0007	0.9560	-0.24406	-0.17823	-0.40203	-0.16400
551.9596	60.5939	282.1478	3.7189	0.3318	0.0014	0.9333	-0.20676	-0.14238	-0.40751	-0.12453
552.2151	61.3932	275.0922	2.4399	0.4288	0.0011	0.9034	-0.14269	-0.08658	-0.38821	-0.06639
553.3539	61.9198	272.8650	1.5757	0.4907	0.0010	0.8713	-0.06667	-0.02097	-0.35593	-0.00141
553.5798	62.1762	270.8525	1.0359	0.5612	0.0024	0.8277	-0.01448	-0.02424	-0.36479	-0.04021
553.7420	62.6074	269.0286	0.70356	0.6200	0.0017	0.7846	0.06258	0.09311	-0.30740	-0.10511
553.8101	63.2368	267.3842	4.8777	0.6882	0.0031	0.7255	0.10620	0.13655	-0.31493	-0.14288
553.9595	63.7261	265.8927	3.4720	0.7342	0.0028	0.6790	0.17658	0.20344	-0.22719	-0.20251
554.3069	64.7565	264.5167	2.5388	0.7986	0.0042	0.6019	0.18872	0.21984	-0.22822	-0.20352
554.3882	65.2187	263.2527	1.9067	0.8496	0.0033	0.5275	0.23740	0.26948	-0.15071	-0.23267
554.6010	65.5975	262.0896	1.4731	0.8819	0.0023	0.4715	0.29732	0.33069	-0.04540	-0.26109
554.9463	65.9463	261.0084	1.1529	0.9184	0.0023	0.3955	0.33462	0.37112	0.02691	-0.24885
555.2704	66.2704	260.0010	0.9235	0.9543	0.0019	0.2988	0.40933	0.44180	0.11916	-0.25771
555.5685	66.5685	259.0673	0.7529	0.9757	0.0008	0.2191	0.55489	0.57051	0.27810	-0.34858
555.8410	66.8410	258.2034	0.6243	0.9872	-0.0001	0.1595	0.69443	0.69115	0.37500	-0.49454
556.0897	67.0897	257.4052	0.5240	0.9937	-0.0007	0.1124	0.82026	0.79806	0.57941	-0.67384
548.3271	66.2302	288.1093	101.4025	0.1641	-0.0012	0.9770	-0.25505	-0.20770	-0.45275	-0.80798
548.6194	66.5812	285.6755	72.1869	0.2300	0.0008	0.9634	-0.33290	-0.26557	-0.41139	-0.25161
549.6683	64.6583	283.0005	49.0474	0.2904	0.0004	0.9569	-0.30378	-0.22661	-0.43299	-0.19166
549.7872	64.2951	280.2898	32.6886	0.3581	0.0010	0.9337	-0.26033	-0.18559	-0.43418	-0.17238
549.9090	64.1891	277.6653	21.5009	0.4248	0.0007	0.9053	-0.22280	-0.15403	-0.43197	-0.13554
549.7068	64.2940	275.3282	14.5232	0.5777	0.0007	0.8730	-0.16277	-0.10403	-0.42039	-0.08572
549.3785	64.5048	272.9287	9.5530	0.8158	0.0012	0.8304	-0.08859	-0.04330	-0.39329	-0.02634
549.1838	64.7733	269.9762	6.5956	0.8571	0.0019	0.7879	-0.03254	-0.00470	-0.39981	-0.01743
549.0013	65.0707	267.1446	4.5956	0.8847	0.0026	0.7288	0.04182	0.07265	-0.34527	-0.08150
549.7939	65.3774	264.4900	3.3025	0.7312	0.0024	0.6821	0.15217	0.18189	-0.26385	-0.18022
549.9963	65.6780	263.9890	2.4374	0.7339	0.0035	0.6080	0.16226	0.19725	-0.26156	-0.18139
549.4491	65.9737	262.6025	1.8469	0.8467	0.0028	0.5321	0.20382	0.24157	-0.18813	-0.20585
549.9963	66.2535	263.3258	1.4375	0.8801	0.0020	0.4749	0.25723	0.29823	-0.07948	-0.22998
549.5725	66.5144	262.1503	1.1330	0.9161	0.0018	0.4009	0.28599	0.33214	0.00484	-0.20894
549.9876	66.7661	261.0566	0.9143	0.9529	0.0016	0.3034	0.35240	0.39613	0.08131	-0.20497
549.2678	67.0113	260.0361	0.7501	0.9750	0.0007	0.2222	0.49909	0.52556	0.23559	-0.29256
549.4539	67.2446	259.0898	0.6255	0.9869	0.0000	0.1611	0.64087	0.64612	0.31791	-0.44194
549.5762	67.4631	258.2141	0.5274	0.9935	-0.0006	0.1135	0.76136	0.74563	0.45544	-0.63134
549.6545	67.6657	257.4063	0.4472	0.9970	-0.0012	0.0773	0.76213	0.74644	0.52556	-0.77847
547.6589	70.8680	288.2168	78.3538	0.1613	0.0002	0.9869	-0.32434	-0.25553	-0.40556	-0.77847
547.9940	70.9868	285.7950	57.7679	0.2266	0.0004	0.9740	-0.37477	-0.25869	-0.42394	-0.71493
547.2559	69.4597	283.1236	40.5140	0.2879	0.0002	0.9577	-0.35774	-0.25869	-0.41528	-0.66800
547.3402	69.3111	280.4127	27.7596	0.3549	0.0007	0.9349	-0.30699	-0.15795	-0.41924	-0.61945
547.6384	69.5439	277.7897	18.7242	0.4812	0.0003	0.9069	-0.15795	-0.10129	-0.41223	-0.52945
547.8844	69.7753	275.3436	12.6928	0.5534	0.0004	0.8746	-0.08434	-0.04409	-0.41223	-0.47268
547.9384	69.8987	273.1163	8.6928	0.6234	0.0015	0.8329	-0.02338	-0.00759	-0.39472	-0.01870
547.9384	69.8987	273.1163	8.6928	0.6234	0.0015	0.7908	0.05003	0.07692	-0.34330	-0.08402
547.9384	69.8987	273.1163	8.6928	0.6234	0.0015	0.7319	0.08820	0.11842	-0.35394	-0.12199
547.9384	69.8987	273.1163	8.6928	0.6234	0.0015	0.6851	0.15397	0.18299	-0.26653	-0.18290
547.9384	69.8987	273.1163	8.6928	0.6234	0.0015	0.6137	0.15987	0.19471	-0.26133	-0.18266
547.9384	69.8987	273.1163	8.6928	0.6234	0.0015	0.5365	0.19049	0.22970	-0.19452	-0.19925
547.9384	69.8987	273.1163	8.6928	0.6234	0.0015	0.4781	0.23274	0.27755	-0.08589	-0.21493
547.9384	69.8987	273.1163	8.6928	0.6234	0.0015	0.4061	0.24488	0.29844	-0.01398	-0.17822
547.9384	69.8987	273.1163	8.6928	0.6234	0.0015	0.3078	0.29057	0.34485	0.05808	-0.14924
547.9384	69.8987	273.1163	8.6928	0.6234	0.0015	0.2252	0.43263	0.46645	0.20095	-0.22174
547.9384	69.8987	273.1163	8.6928	0.6234	0.0015	0.1626	0.57796	0.58482	0.25949	-0.37499
547.9384	69.8987	273.1163	8.6928	0.6234	0.0015	0.1143	0.69351	0.67638	0.38086	-0.57775
547.9384	69.8987	273.1163	8.6928	0.6234	0.0015	0.0775	0.69358	0.67524	0.16960	-0.73860
547.9384	69.8987	273.1163	8.6928	0.6234	0.0015	0.9872	-0.29037	-0.22339	-0.36594	-0.21365
547.9384	69.8987	273.1163	8.6928	0.6234	0.0015	0.9746	-0.27487	-0.20249	-0.39443	-0.19240
547.9384	69.8987	273.1163	8.6928	0.6234	0.0015	0.9583	-0.24232	-0.16702	-0.39491	-0.15443
547.9384	69.8987	273.1163	8.6928	0.6234	0.0015	0.9399	-0.20209	-0.13143	-0.39955	-0.11470
547.9384	69.8987	273.1163	8.6928	0.6234	0.0015	0.9084	-0.14653	-0.09236	-0.39766	-0.07353
547.9384	69.8987	273.1163	8.6928	0.6234	0.0015	0.8759	-0.07611	-0.04057	-0.38340	-0.02439
547.9384	69.8987	273.1163	8.6928	0.6234	0.0015	0.8352	-0.01388	-0.01194	-0.38827	-0.02191
547.9384	69.8987	273.1163	8.6928	0.6234	0.0015	0.7936	0.05514	0.07950	-0.34393	-0.08567
547.9384	69.8987	273.1163	8.6928	0.6234	0.0015	0.7348	0.08864	0.11867	-0.35906	-0.12280
547.9384	69.8987	273.1163	8.6928	0.6234	0.0015	0.6879	0.14815	0.17921	-0.27814	-0.18250
547.9384	69.8987	273.1163	8.6928	0.6234	0.0015	0.6191	0.14696	0.18602	-0.27237	-0.18141
547.9384	69.8987	273.1163	8.6928	0.6234	0.0015	0.5407	0.15456	0.20340	-0.22008	-0.18468
547.9384	69.8987	273.1163	8.6928	0.6234	0.0015	0.4812	0.16781	0.22762	-0.11754	-0.18208
547.9384	69.8987	273.1163	8.6928	0.6234	0.0015	0.4112	0.14606	0.21964	-0.05092	-0.11801
547.9384	69.8987	273.1163	8.6928	0.6234	0.0015	0.3120	0.14654	0.22865	0.00365	-0.04152
547.9384	69.8987	273.1163	8.6928	0.6234</						

592.8748	70.9744	273.3217	7.2008	0.5469	0.0007	0.8372	0.00993	0.02707	-0.36630	0.03551
595.7706	70.3497	271.2952	5.1892	0.6051	-0.0001	0.7961	0.07564	0.09572	-0.32655	0.10070
597.9999	69.9064	269.4506	3.7936	0.6754	0.0013	0.7375	0.10554	0.13371	-0.34351	0.13903
599.7219	69.5950	267.7747	2.8190	0.7233	0.0012	0.6906	0.16073	0.18952	-0.26884	0.19683
601.0620	69.3804	266.2526	2.1466	0.7812	0.0015	0.6243	0.15931	0.19236	-0.26168	0.19495
602.0882	69.2474	264.8413	1.6738	0.8386	0.0014	0.5447	0.15941	0.19767	-0.22284	0.18845
602.8784	69.1704	263.5319	1.3338	0.8750	0.0011	0.4842	0.15973	0.21133	-0.12728	0.18279
603.4916	69.1304	262.3234	1.0747	0.9094	0.0006	0.4160	0.10576	0.18003	-0.06798	0.11039
603.9395	69.1307	261.1956	0.8871	0.9487	0.0007	0.3161	0.03625	0.13074	-0.03365	-0.01241
604.2428	69.1699	260.1384	0.7416	0.9730	-0.0002	0.2310	0.09732	0.17418	-0.07968	-0.07324
604.4434	69.2327	259.1557	0.6288	0.9862	-0.0002	0.1657	0.26397	0.30005	-0.10384	-0.02210
604.5739	69.3074	258.2458	0.5377	0.9932	-0.0008	0.1161	0.45702	0.44976	-0.20089	0.27253
604.6563	69.3871	257.4094	0.4589	0.9970	-0.0013	0.0780	0.54024	0.52437	-0.01009	0.51253
546.5345	84.0649	288.3935	22.1805	0.1566	-0.0007	0.9877	-0.23252	-0.17356	-0.30015	-0.16367
559.1154	81.6340	286.0193	22.1202	0.2203	-0.0005	0.9754	-0.23484	-0.16851	-0.35774	-0.15822
569.4189	79.2155	283.3744	22.4747	0.2828	-0.0005	0.9592	-0.20636	-0.13454	-0.35939	-0.12151
577.6172	77.0638	280.6815	17.4008	0.3478	-0.0002	0.9376	-0.16313	-0.09632	-0.35148	-0.07825
584.0144	75.2836	278.0774	12.8931	0.4130	-0.0006	0.9107	-0.10907	-0.06348	-0.35022	-0.04258
588.9473	73.8805	275.6447	9.3463	0.4782	-0.0004	0.8783	-0.04134	-0.01938	-0.34463	-0.00257
592.7331	72.7951	273.4128	6.7435	0.5440	0.0003	0.8391	0.02162	0.03542	-0.34916	0.04400
595.6491	71.9678	271.3878	4.9216	0.6020	-0.0005	0.7985	0.08023	0.10122	-0.31694	0.10588
597.8978	71.3444	269.5417	3.6364	0.6726	0.0010	0.7400	0.10293	0.13672	-0.33967	0.14316
599.6372	70.8744	267.8611	2.7248	0.7208	0.0009	0.6931	0.14816	0.18612	-0.27686	0.19852
600.9949	70.5223	266.3340	2.0909	0.7772	0.0009	0.6293	0.13814	0.18271	-0.27284	0.19530
602.0380	70.2712	264.9160	1.6417	0.8361	0.0010	0.5486	0.10880	0.16369	-0.25473	0.17003
602.8411	70.0938	263.5972	1.3154	0.8734	0.0009	0.4871	0.07486	0.14194	-0.17477	0.13760
603.4657	69.9672	262.3787	1.0655	0.9072	0.0002	0.4207	-0.00760	0.08180	-0.12592	0.04883
603.9240	69.8943	261.2405	0.8843	0.9474	0.0004	0.3201	-0.14202	-0.02128	-0.11564	-0.10938
604.2347	69.8727	260.1717	0.7425	0.9723	0.0001	0.2337	-0.15302	-0.03289	-0.02085	-0.25292
604.4399	69.8849	259.1773	0.6321	0.9859	-0.0003	0.1672	0.02244	0.08442	-0.00680	-0.22162
604.5732	69.9166	258.2563	0.5421	0.9931	-0.0007	0.1170	0.30304	0.31046	-0.10387	0.07293
604.6569	69.9592	257.4103	0.4630	0.9969	-0.0011	0.0781	0.45546	0.43946	-0.06842	0.34802
546.3517	85.8970	288.4299	20.9376	0.1558	-0.0010	0.9878	-0.26366	-0.20255	-0.37532	-0.19103
558.9196	83.7727	286.0648	21.9951	0.2190	-0.0008	0.9757	-0.23467	-0.16911	-0.36962	-0.15780
569.2271	81.4541	283.4322	19.4687	0.2816	-0.0007	0.9595	-0.19054	-0.12184	-0.34350	-0.10728
577.4357	79.2631	280.7493	15.6793	0.3461	-0.0004	0.9382	-0.13733	-0.07705	-0.32438	-0.05633
583.8474	77.3568	278.1547	11.9240	0.4107	-0.0009	0.9118	-0.07295	-0.04244	-0.31724	-0.01928
588.7965	75.7830	275.7276	8.7957	0.4763	-0.0006	0.8793	0.00132	0.00532	-0.30965	0.02061
592.5991	74.5166	273.4990	6.4283	0.5412	0.0000	0.8409	0.06493	0.06871	-0.30908	0.07365
595.5330	73.5147	271.4764	4.7369	0.5990	-0.0009	0.8008	0.12096	0.13641	-0.27901	0.13961
597.7992	72.7309	269.6295	3.5287	0.6698	0.0006	0.7425	0.14745	0.17001	-0.29537	0.17818
599.5550	72.1165	267.9451	2.6604	0.7189	0.0006	0.6956	0.19943	0.21859	-0.23847	0.23209
600.9293	71.6369	266.4134	2.0536	0.7733	0.0003	0.6241	0.21523	0.23025	-0.23004	0.24255
601.9886	71.2752	264.9893	1.6212	0.8336	0.0006	0.5523	0.21150	0.22994	-0.21626	0.23568
602.8044	71.0027	263.6614	1.3045	0.8718	0.0006	0.4899	0.18298	0.22214	-0.14403	0.22354
603.4402	70.7937	262.4334	1.0610	0.9055	-0.0001	0.4252	0.08762	0.15896	-0.09999	0.15244
603.9086	70.6505	261.2849	0.8845	0.9461	0.0002	0.3240	-0.09681	0.01498	-0.10108	-0.01993
604.2268	70.5706	260.2048	0.7453	0.9717	-0.0001	0.2364	-0.23793	-0.13018	-0.02618	-0.24294
604.4364	70.5340	259.1988	0.6363	0.9857	-0.0004	0.1685	-0.11441	-0.07112	-0.02980	-0.30235
604.5724	70.5241	258.2667	0.5471	0.9930	-0.0007	0.1179	-0.21740	-0.20098	-0.06814	-0.03986
604.6575	70.5307	257.4113	0.4674	0.9969	-0.0013	0.0784	0.44653	0.41269	-0.09971	0.24429
546.2196	87.2258	288.4522	15.4503	0.1552	-0.0014	0.9879	-0.17763	-0.12794	-0.19899	-0.11723
558.7582	85.5378	286.1026	18.5862	0.2179	-0.0010	0.9760	-0.19736	-0.13565	-0.31686	-0.12354
569.0583	83.4242	283.4832	17.4718	0.2806	-0.0008	0.9598	-0.16963	-0.10033	-0.32043	-0.08595
577.2699	81.2720	280.8113	14.5355	0.3444	-0.0006	0.9388	-0.12492	-0.05931	-0.29836	-0.03972
583.6910	79.2957	278.2270	11.2797	0.4087	-0.0011	0.9127	-0.06926	-0.03066	-0.29132	-0.00761
588.6533	77.5908	275.8064	8.4283	0.4745	-0.0008	0.8803	-0.00371	0.00599	-0.29130	0.02365
592.4703	76.1708	273.5819	6.2176	0.5385	-0.0003	0.8426	0.05368	0.05911	-0.29771	0.06648
595.4205	75.0135	271.5622	4.6134	0.5960	-0.0013	0.8030	0.09545	0.12046	-0.28183	0.12244
597.7031	74.0826	269.7151	3.4573	0.6672	0.0002	0.7449	0.10855	0.15198	-0.31511	0.15960
599.4744	73.3332	268.0272	2.6180	0.7161	0.0003	0.6980	0.13093	0.18459	-0.28110	0.20581
600.8649	72.7330	266.4915	2.0302	0.7694	0.0002	0.6387	0.12186	0.17988	-0.28636	0.20410
601.9401	72.2657	265.0615	1.6093	0.8312	0.0003	0.5560	0.08030	0.14760	-0.31349	0.16473
602.7681	71.9018	263.7249	1.2991	0.8702	0.0004	0.4926	-0.00411	0.08804	-0.27274	0.09577
603.4148	71.6132	262.4876	1.0601	0.9030	-0.0005	0.4296	-0.14932	-0.02386	-0.23985	-0.03595
603.8933	71.4018	261.3291	0.8869	0.9448	-0.0001	0.3278	-0.33598	-0.18720	-0.27091	-0.26619
604.2188	71.2652	260.2377	0.7494	0.9710	-0.0001	0.2390	-0.39800	-0.27251	-0.21593	-0.43350
604.4330	71.1810	259.2202	0.6414	0.9855	-0.0004	0.1698	-0.15920	-0.09592	-0.21583	-0.34463
604.5715	71.1305	258.2771	0.5525	0.9929	-0.0008	0.1187	-0.17782	-0.18772	-0.06943	-0.03132
604.6582	71.1019	257.4124	0.4718	0.9969	-0.0012	0.0786	0.43318	0.40420	-0.27384	0.21585

# pylon top aft of plate

X	Y	Z	AREA	EX	EY	EZ	CP1	CP2	CP3	CP4
545.9979	87.8095	228.2664	73.4441	0.0753	0.9972	-0.0026	-0.26528	-0.19788	-0.66882	-0.13638
558.2789	86.4119	230.1908	54.4840	0.1576	0.9876	-0.0006	-0.23629	-0.17182	-0.70698	-0.08755
558.4683	84.4716	232.4404	38.9483	0.2228	0.9749	-0.0004	-0.2157	-0.15467	-0.67384	-0.06002
576.6405	82.3940	234.7827	27.1004	0.2751	0.9614	-0.0011	-0.14344	-0.09670	-0.54344	-0.00526
583.0624	80.4205	237.0826	18.5943	0.3162	0.9484	-0.0015	-0.08408	-0.04268	-0.43312	-0.03709
588.0476	78.7255	239.2894	12.7105	0.3481	0.9375	-0.0018	-0.03802	-0.00003	-0.34925	-0.06552
591.9005	77.1862	241.2894	8.7405	0.3730	0.9278	-0.0018	-0.00900	-0.04285	-0.27943	-0.09571
594.8912	75.3527	243.1437	6.0903	0.3898	0.9209	-0.0014	0.05641	-0.08670	-0.22250	-0.12872
597.2170	74.3438	244.8518	4.2966	0.4051	0.9143	-0.0031	0.08931	-0.11800	-0.18981	-0.15168
599.0348	74.3488	246.4242	3.0634	0.4182	0.9083	-0.0034	0.12101	-0.14767	-0.15815	-0.17644
600.4702	73.4469	247.8631	2.2133	0.4255	0.9049	-0.0025	0.14792	-0.17312	-0.13955	-0.20061
601.5916	72.9131	249.2087	1.6092	0.4316	0.9021	-0.0008	0.16718	-0.19190	-0.13705	-0.22123
601.4689	72.4878	250.4760	1.1741	0.4416	0.8972	-0.0006	0.19321	-0.21704	-0.13511	-0.25106
603.1636	72.1424	251.6568	0.8459	0.4517	0.8922	-0.0006	0.22789	-0.24940	-0.14117	-0.29194
603.6888	71.8774	252.7670	0.5977	0.4548	0.8906	-0.0024	0.26839	-0.28599	-0.17880	-0.33870
604.0621	71.6891	253.8209	0.4037	0.4516	0.8922	-0.0004	0.31976	-0.33171	-0.19675	-0.39262
604.3241	71.5574	254.8129	0.2521	0.4456	0.8953	-0.0005	0.37753	-0.38036	-0.20974	-0.43808
604.5088	71.4644	255.7392	0.1324	0.4450	0.8956	-0.0016	0.42706	-0.42036	-0.15756	-0.46466
604.6383	71.3975	256.5922	0.0385	0.4478	0.8942	-0.0035	0.49223	-0.47758	-0.21655	-0.45160
545.7231	87.8423	233.8326	72.7780	0.0733	0.9973	-0.0018	-0.24038	-0.17874	-0.66652	-0.08519
557.5414	86.5338	235.0736	57.5789	0.1530	0.9882	-0.0016	-0.18139	-0.12717	-0.72187	-0.02421
567.4364	84.7054	236.6692	43.4304	0.2165	0.9763	-0.0010	-0.11772	-0.07927	-0.58985	-0.06607
575.4548	82.7274	238.4007	31.7903	0.2680	0.9634	-0.0003	-0.04668	-0.01943	-0.37282	-0.09067
581.8199	80.8269	240.1535	22.8516	0.3088	0.9511	-0.0002	0.01265	-0.03898	-0.32258	-0.09916
586.8115	79.1235	241.8580	16.2961	0.3409	0.9401	-0.0002	0.03112	-0.05801	-0.28256	-0.10857
590.7106	77.6575	243.4746	11.6446	0.3681	0.9299	-0.0001	0.05540	-0.08216	-0.24427	-0.12368
593.7658	76.4240	244.9818	8.3887	0.3896	0.9167	-0.0004	0.07656	-0.10424	-0.16222	-0.13715
596.1692	75.4013	246.3898	4.9286	0.4133	0.9106	-0.0008	0.10140	-0.12916	-0.18797	-0.15567
598.0745	74.5846	247.7040	3.4749	0.4228	0.9062	-0.0014	0.12982	-0.15699	-0.16820	-0.17952
599.5965	73.8539	248.9223	2.5007	0.4268	0.9043	-0.0020	0.15944	-0.18529	-0.15960	-0.20720
600.8097	72.8511	250.0708	2.4550	0.4313	0.9002	-0.0034	0.18939	-0.21354	-0.15403	-0.23843
601.7880	72.4355	252.1943	1.3408	0.4462	0.8950	-0.0015	0.22767	-0.24886	-0.14065	-0.28017
603.3049	72.1235	253.1704	0.9587	0.4512	0.8924	-0.0003	0.27401	-0.29051	-0.13138	-0.32988
603.6850	71.8795	254.1066	0.6566	0.4517	0.8922	-0.0026	0.32771	-0.33789	-0.12769	-0.38429
604.0583	71.6898	255.0006	0.4132	0.4471	0.8945	-0.0007	0.38879	-0.38987	-0.17801	-0.43346
604.3537	71.5417	255.8445	0.2171	0.4469	0.8946	-0.0004	0.44082	-0.43574	-0.15945	-0.47387
604.5879	71.4227	256.6259	0.0626	0.4504	0.8928	-0.0029	0.51302	-0.49133	-0.21140	-0.46858
545.5417	87.8642	239.5533	71.7991	0.0718	0.9974	-0.0012	-0.29398	-0.22397	-0.84950	-0.11001
556.9553	86.6322	240.3485	57.5742	0.1492	0.9888	-0.0016	-0.26390	-0.19664	-0.95164	-0.05413
566.4685	84.9225	241.4255	44.6205	0.2103	0.9776	-0.0013	-0.19870	-0.14633	-0.79007	-0.01581
574.2367	83.0645	242.6269	33.6146	0.2602	0.9656	-0.0010	-0.11470	-0.07255	-0.55805	-0.04719
580.4712	81.2608	243.8711	24.8300	0.3002	0.9539	-0.0010	-0.05367	-0.01488	-0.40693	-0.06660
585.4221	79.6222	245.1060	18.1495	0.3321	0.9432	-0.0013	0.01831	-0.01831	-0.37655	-0.08423
589.3423	78.1909	246.2996	13.2459	0.3572	0.9340	-0.0013	0.04024	-0.04632	-0.37739	-0.10209
592.4551	76.9658	247.4335	9.6972	0.3781	0.9258	-0.0011	0.05707	-0.07103	-0.24119	-0.12107
594.9413	75.9316	248.5083	7.1450	0.3921	0.9197	-0.0005	0.06461	-0.09653	-0.21122	-0.14052
596.9447	75.0620	249.5254	5.0339	0.4063	0.9134	-0.0007	0.09103	-0.12098	-0.18927	-0.16494
598.5692	74.3281	250.4824	3.3274	0.4182	0.9084	-0.0032	0.12102	-0.14881	-0.17468	-0.19541
599.8947	73.7170	251.3845	2.2277	0.4279	0.9038	-0.0034	0.15541	-0.18042	-0.16703	-0.22284
600.9905	73.2072	252.2393	1.1841	0.4389	0.8985	-0.0002	0.18330	-0.20649	-0.16758	-0.25904
601.8982	72.7729	253.0939	0.7619	0.4462	0.8949	-0.0027	0.21889	-0.23914	-0.16216	-0.30297
602.6474	72.4057	253.8846	0.4749	0.4505	0.8928	-0.0044	0.26326	-0.27893	-0.15862	-0.34934
603.2412	71.9886	254.6453	0.2461	0.4475	0.8943	-0.0001	0.31210	-0.32198	-0.15332	-0.39351
604.1755	71.6310	255.3741	0.0695	0.4485	0.8938	-0.0010	0.36919	-0.37075	-0.14768	-0.42764
604.5304	71.4517	256.0627	0.0695	0.4532	0.8914	-0.0016	0.41867	-0.41434	-0.17602	-0.40895
545.4229	87.8787	245.3448	70.8895	0.0708	0.9975	-0.0008	-0.31527	-0.24427	-0.97888	-0.10741
556.5295	86.7036	246.8236	56.5242	0.1464	0.9892	-0.0011	-0.30083	-0.22937	-0.12662	-0.05769
565.7042	85.0907	247.4877	44.2910	0.2052	0.9787	-0.0009	-0.22775	-0.17166	-0.90094	-0.03597
573.2260	83.3376	248.2398	33.8805	0.2535	0.9673	-0.0006	-0.13569	-0.08862	-0.59806	-0.02366
579.3151	81.6234	248.0298	25.4231	0.2925	0.9563	-0.0004	-0.06905	-0.02388	-0.40361	-0.05058
584.2049	80.0484	248.8256	18.8606	0.3240	0.9461	-0.0004	0.02947	-0.01516	-0.29308	-0.06955
588.1262	78.6536	249.6065	13.9390	0.3490	0.9378	-0.0003	0.00947	-0.00423	-0.25913	-0.08640
591.2818	77.4410	250.3601	10.3014	0.3707	0.9288	-0.0008	0.03262	-0.06356	-0.22740	-0.10427
593.8394	76.3996	251.0843	7.6347	0.3851	0.9207	-0.0003	0.04965	-0.08626	-0.20099	-0.12222
595.3919	75.5093	251.7783	5.6688	0.4126	0.9109	-0.0002	0.07514	-0.10868	-0.18161	-0.14519
597.5555	74.7449	252.4400	4.1588	0.4126	0.9010	-0.0025	0.10531	-0.13566	-0.16801	-0.17477
599.0881	74.0940	253.0750	2.1063	0.4158	0.9095	-0.0008	0.14147	-0.16801	-0.15945	-0.20251
600.2932	73.5387	253.6855	1.2850	0.4233	0.9060	-0.0008	0.17272	-0.19633	-0.15686	-0.23953
601.3090	73.0566	254.2716	0.6400	0.4340	0.9009	-0.0031	0.21284	-0.23227	-0.15006	-0.28370
602.1627	72.6387	254.8312	0.1408	0.4420	0.8970	-0.0048	0.26106	-0.27497	-0.14540	-0.33103
603.8845	72.2779	255.3681	0.7587	0.4478	0.8941	-0.0034	0.31363	-0.32104	-0.14062	-0.37727
604.4856	71.9681	255.8797	0.4618	0.4470	0.8945	-0.0016	0.37375	-0.37246	-0.15680	-0.41648
604.0344	71.7025	256.3588	0.2329	0.4497	0.8932	-0.0023	0.42410	-0.41719	-0.15118	-0.41200
545.3540	87.8871	251.1664	70.2674	0.0702	0.9975	-0.0004	-0.32312	-0.25679	-0.10718	-0.03773
556.2710	86.7466	251.3929	55.5680	0.1448	0.9895	-0.0006	-0.32690	-0.25617	-0.12613	-0.06507
565.2228	85.1944	251.7099	43.6841	0.2020	0.9794	-0.0004	-0.25527	-0.19870	-0.98950	-0.02616
572.5732	83.5096	252.0711	33.6549	0.2492	0.9685	-0.0002	-0.16168	-0.11103	-0.63426	-0.00819
578.5554	81.8554	252.4535	25.4619	0.2876	0.9578	-0.0000	-0.09117	-0.03941	-0.40586	-0.03577
583.3950	80.3245	252.8420	19.0434	0.3187	0.9479	-0.0001	0.04701	-0.03532	-0.24949	-0.05744
587.3100	78.9561	253.2269	14.1715	0.3437	0.9391	-0.0002	0.08620	-0.05704	-0.22160	-0.07528
590.4912	77.7544	253.6021	10.5280	0.3650	0.9310	-0.0001	0.13481	-0.07823	-0.20100	-0.09197
593.0964	76.7101	253.9663	7.8243	0.3894	0.9247	-0.0001	0.18326	-0.10409	-0.18521	-0.10933
595.2503	75.8055	254.3185	5.8094	0.4076	0.9186	-0.0001	0.23055	-0.12713	-0.17382	-0.13109
597.0450	75.0204	254.6573	4.2547	0.4138	0.9104	-0.0010	0.28205	-0.15746	-0.16554	-0.15750
598.5541	74.3413	254.9849	2.9446	0.4229	0.9062	-0.0017	0.33380	-0.18743	-0.16119	-0.18525
599.8361	73.7613	255.3044	1.6260	0.4322	0.9018	-0.0042	0.39063	-0.22448	-0.15632	-0.22100
600.9291	73.2815	255.5951	1.1135	0.4390	0.8985	-0.0035	0.45450	-0.26577	-0.15566	-0.26078
601.8622	72.8688	255.8729	0.7259	0.4442	0.8959	-0.0001	0.50561	-0.30945	-0.15428	-0.30184
603.6826	72.4030	256.1357	0.4319	0.4463	0.8949	-0.0033	0.56336	-0.35636	-0.16058	-0.34028
603.9536	71.7441	256.6791	0.2124	0.4503	0.8929	-0.0029	0.61381	-0.39968	-0.15240	-0.37163
604.4606	71.4873	256.8972								

587.0250	79.0599	256.9989	14.2204	0.3420	0.9397	0.0000	-0.02192	0.03486	-0.25760	0.05459
590.2146	77.8627	256.9988	10.5821	0.3628	0.9319	0.0000	0.00111	0.05567	-0.23330	0.07226
592.8365	76.8177	256.9989	7.8709	0.3791	0.9253	0.0000	0.02549	0.07463	-0.21495	0.08673
595.0122	75.9080	256.9989	5.8430	0.3936	0.9193	0.0000	0.05295	0.09549	-0.19976	0.10200
596.8325	75.1158	256.9989	4.3124	0.4054	0.9141	0.0000	0.08433	0.12026	-0.18785	0.12086
598.3693	74.4264	256.9989	3.1615	0.4138	0.9104	0.0000	0.11920	0.14872	-0.17764	0.14425
599.6789	73.8231	256.9989	2.2893	0.4239	0.9057	0.0000	0.15598	0.17928	-0.17086	0.17082
600.7998	73.2926	256.9989	1.6142	0.4322	0.9018	0.0000	0.19860	0.21499	-0.16436	0.20259
601.7615	72.8284	256.9989	1.0987	0.4376	0.8992	0.0000	0.24514	0.25384	-0.16199	0.23642
602.5908	72.4227	256.9989	0.7105	0.4417	0.8972	-0.0001	0.29628	0.29612	-0.15713	0.27223
603.3087	72.0675	256.9989	0.4189	0.4455	0.8953	-0.0001	0.35611	0.34444	-0.15784	0.30895
603.9284	71.7573	256.9989	0.2039	0.4501	0.8930	0.0000	0.41470	0.39282	-0.14787	0.34405
604.4529	71.4912	256.9990	0.0539	0.4552	0.8904	0.0000	0.51747	0.46130	-0.17319	0.34935
545.3541	87.8877	262.8315	70.2679	0.0702	0.9975	0.0004	-0.27936	-0.22696	-1.15990	-0.05735
556.2711	86.7467	262.6050	55.5678	0.1448	0.9895	0.0005	-0.31189	-0.25391	-1.37832	-0.04355
556.2228	85.1944	262.2880	45.3339	0.2020	0.9794	0.0004	-0.25072	-0.19843	-1.07774	-0.04172
572.5732	83.5096	261.5443	35.6554	0.2492	0.9684	0.0002	-0.16397	-0.11821	-0.68844	-0.01971
576.3554	81.8553	261.1458	25.4620	0.2876	0.9584	0.0000	-0.09412	-0.04874	-0.44143	-0.00763
587.3500	78.9561	260.7709	19.0431	0.3186	0.9479	-0.0001	-0.04925	0.00296	-0.32944	0.03376
590.4912	77.7545	260.3956	14.1717	0.3437	0.9391	-0.0002	-0.02101	0.03674	-0.28283	0.05641
593.0965	76.7101	260.0315	10.5287	0.3650	0.9310	-0.0001	-0.00005	0.05800	-0.25858	0.07364
595.2503	75.8055	259.6793	7.8242	0.3807	0.9247	0.0004	0.02369	0.07625	-0.23987	0.08710
597.0448	75.0204	259.3405	5.8094	0.3951	0.9186	0.0001	0.05065	0.09570	-0.22368	0.10080
598.5540	74.3413	259.0132	4.2924	0.4076	0.9132	0.0005	0.08014	0.11783	-0.21002	0.11689
599.8361	73.7513	258.6970	3.1549	0.4139	0.9103	0.0010	0.11307	0.14370	-0.19687	0.13710
600.9291	73.2339	258.3934	2.2947	0.4229	0.9062	-0.0017	0.14640	0.17024	-0.18803	0.15846
601.8621	72.7815	258.1028	1.6261	0.4322	0.9018	-0.0042	0.18292	0.19930	-0.17809	0.18118
602.6632	72.3869	257.8250	1.1137	0.4389	0.8985	-0.0036	0.22377	0.23141	-0.17140	0.20487
603.3556	72.0431	257.5623	0.7258	0.4441	0.8960	-0.0001	0.27308	0.26980	-0.16217	0.23191
603.9535	71.7441	257.3188	0.4318	0.4465	0.8948	0.0034	0.33413	0.31763	-0.15711	0.26422
604.4606	71.4873	257.1007	0.2124	0.4503	0.8929	0.0030	0.41014	0.37831	-0.15006	0.30595
545.4229	87.8788	268.6531	0.0567	0.4554	0.8903	0.0011	0.49638	0.44826	-0.14933	0.31090
556.5296	86.7038	268.1743	70.8902	0.0708	0.9975	0.0008	-0.22580	-0.19955	-1.11931	-0.06160
556.5066	85.0908	267.1402	56.5243	0.1464	0.9892	0.0011	-0.25899	-0.22332	-1.31574	-0.04701
572.5732	83.3376	266.7581	44.2912	0.2052	0.9787	0.0009	-0.20176	-0.14984	-1.03766	-0.02538
579.3151	81.6233	266.3806	33.8806	0.2535	0.9673	0.0006	-0.13338	-0.06048	-0.67634	0.02509
584.2049	80.0483	266.0352	25.4233	0.2926	0.9562	0.0005	-0.08165	0.00473	-0.44806	0.06579
588.1262	78.6536	265.1722	18.8611	0.3240	0.9461	0.0004	-0.04429	0.02506	-0.34431	0.07753
591.2818	77.4410	264.3913	13.9390	0.3490	0.9371	0.0004	-0.01828	0.04732	-0.29986	0.07959
593.8394	76.3936	263.6378	10.3014	0.3707	0.9288	0.0000	0.00168	0.06502	-0.27655	0.08511
595.9318	75.5093	262.9136	7.6347	0.3852	0.9228	0.0008	0.02549	0.08176	-0.25721	0.09430
597.6553	74.7449	262.2195	5.6687	0.3995	0.9167	0.0003	0.05217	0.09961	-0.23968	0.10650
599.0879	74.0940	261.5578	4.1988	0.4126	0.9109	-0.0002	0.07972	0.11901	-0.22979	0.12001
600.2931	73.5387	260.9229	2.7064	0.4233	0.9095	0.0008	0.10728	0.13991	-0.20630	0.13491
601.3088	73.0567	260.3114	2.2832	0.4330	0.9060	0.0008	0.13226	0.15916	-0.19487	0.14787
602.1627	72.6387	259.7164	1.6398	0.4340	0.9009	-0.0032	0.15832	0.17863	-0.18075	0.15888
602.8845	72.2780	259.1668	1.1409	0.4419	0.8970	-0.0048	0.19024	0.20121	-0.16889	0.16941
603.5025	71.9682	258.6298	0.7587	0.4477	0.8942	-0.0033	0.23549	0.23369	-0.15406	0.18779
604.0343	71.7025	258.1182	0.4619	0.4472	0.8944	0.0015	0.30362	0.28416	-0.14709	0.21802
604.4856	71.4744	257.6391	0.2330	0.4495	0.8933	0.0023	0.39125	0.35395	-0.13232	0.27299
545.5417	87.8643	257.2039	0.0638	0.4547	0.8906	-0.0001	0.53572	0.46051	-0.18499	0.32078
556.9553	86.6325	274.4446	71.8002	0.0718	0.9974	0.0013	-0.20806	-0.19779	-0.98034	-0.09507
566.4684	84.9226	273.6495	57.5730	0.1492	0.9888	0.0016	-0.22643	-0.20825	-1.13113	-0.07472
574.2367	83.0646	272.5725	44.6208	0.2103	0.9776	0.0013	-0.15118	-0.13599	-0.89846	-0.04707
580.4712	81.2608	271.3710	33.6151	0.2602	0.9656	0.0010	-0.07018	-0.03518	-0.60086	0.00624
585.4221	79.6222	270.1268	24.8303	0.3002	0.9539	0.0010	-0.03577	0.04713	-0.41816	0.07418
589.3422	78.1910	268.8919	18.1492	0.3321	0.9433	0.0010	-0.02076	0.08608	-0.33673	0.12554
593.4251	76.9659	267.6982	13.2460	0.3572	0.9340	0.0013	-0.00349	0.09207	-0.30124	0.13873
594.9411	75.9316	266.5644	9.6970	0.3781	0.9258	0.0005	0.01732	0.09558	-0.28132	0.13237
596.9446	75.0620	265.4896	7.1451	0.3922	0.9199	0.0011	0.04276	0.10576	-0.26359	0.13068
598.9691	74.3281	264.4724	5.2939	0.4063	0.9138	0.0005	0.06921	0.12081	-0.24618	0.13774
599.9905	73.7171	263.5155	3.9261	0.4182	0.9094	-0.0007	0.09320	0.13667	-0.22897	0.14608
600.9946	73.2073	262.6058	2.762	0.4287	0.9071	-0.0032	0.11429	0.15247	-0.20867	0.15526
601.8980	72.7730	261.7334	1.762	0.4379	0.9038	0.0034	0.12443	0.15547	-0.19553	0.15187
602.8403	72.4057	260.9040	1.1217	0.4428	0.8985	-0.0002	0.12886	0.15847	-0.17958	0.14407
603.2470	72.0987	260.1133	0.7619	0.4462	0.8949	-0.0027	0.13786	0.15958	-0.16557	0.12942
603.7512	71.8433	259.3527	0.4749	0.4505	0.8928	-0.0043	0.17216	0.17757	-0.14849	0.12519
604.1755	71.6310	258.6239	0.2461	0.4477	0.8942	-0.0002	0.24700	0.23021	-0.14144	0.15396
604.5304	71.4517	257.9352	0.0695	0.4486	0.8937	0.0011	0.36990	0.33350	-0.12847	0.23682
545.7232	87.8424	257.3006	72.7779	0.0732	0.9973	0.0018	-0.21807	-0.18765	-0.98016	-0.09507
557.5414	86.5359	278.9243	57.5789	0.1530	0.9882	0.0017	-0.21656	-0.17714	-0.84038	-0.07358
567.4364	84.7054	277.3288	43.4312	0.2165	0.9763	0.0010	-0.14777	-0.12226	-0.66464	-0.04156
575.4548	82.7274	275.5973	31.7901	0.2680	0.9634	0.0005	-0.04775	-0.05391	-0.45226	-0.00625
581.8199	80.8269	273.8444	22.8523	0.3088	0.9511	0.0003	0.01704	0.01978	-0.33305	0.03073
586.8115	79.1235	272.1399	16.2962	0.3409	0.9401	0.0002	0.02646	0.09939	-0.28407	0.09357
590.7105	77.6575	270.5233	11.6451	0.3661	0.9306	0.0004	0.02530	0.14037	-0.26432	0.15876
593.7657	76.4241	269.0161	8.3856	0.3850	0.9229	0.0000	0.04004	0.14129	-0.25044	0.18399
596.1691	75.4013	267.6081	6.0989	0.3996	0.9167	-0.0004	0.06706	0.13948	-0.24238	0.17849
598.0744	74.5546	266.2939	4.4752	0.4133	0.9106	-0.0009	0.09469	0.14884	-0.22801	0.17764
599.5961	73.8539	265.0757	3.3046	0.4228	0.9062	-0.0014	0.11643	0.16007	-0.21416	0.17792
600.8097	73.2851	263.9272	2.4553	0.4268	0.9043	0.0020	0.12725	0.16623	-0.19872	0.17790
601.7879	72.8215	262.8340	1.8313	0.4354	0.9002	0.0034	0.12352	0.16307	-0.18410	0.16573
602.5808	72.4356	261.8037	1.3410	0.4461	0.8950	0.0014	0.10652	0.14818	-0.16404	0.13891
603.2049	72.1235	260.8275	0.9587	0.4512	0.8924	0.0003	0.08909	0.12731	-0.14774	0.09764
603.6849	71.8795	259.8913	0.6566	0.4517	0.8925	-0.0025	0.09799	0.12268	-0.12254	0.07119
604.0583	71.6899	258.9974	0.4132	0.4471	0.8945	0.0008	0.17491	0.18509	-0.11832	0.08147
604.3537	71.5416	258.1534	0.2172	0.4467	0.8947	-0.0005	0.32966	0.28039	-0.08919	0.18465
604.5879	71.4227	257.7721	0.0626	0.4502	0.8929	-0.0030	0.54125	0.45775	-0.20011	0.30683
545.3879	87.8057	285.7315	73.4446	0.0753	0.9972	0.0027	-0.24104	-0.17859	-0.99843	-0.13985
558.2789	86.4119	283.8071	54.4843	0.1576	0.9875	0.0007	-0.21000	-0.14071	-0.62976	-0.08886
568.4683	84.4716	281.5576	38.9483	0.2228	0.9749	-0.0004	-0.16077	-0.08671	-0.52160	-0.03966
576.6404	82.3940	279.2153	27.1005	0.2751	0.9614	-0.0011	-0.08301	-0.03565	-0.39841	0.0084

604.5088	71.4644	258.2587	0.1324	0.4448	0.8956	-0.0016	0.33302	0.30751	-0.08635	0.18491
604.6383	71.3975	257.4057	0.0385	0.4478	0.8941	-0.0035	0.48977	0.45239	-0.14052	0.31434

## plate bottom lower

X	Y	Z	AREA	EX	EY	EZ	CP1	CP2	CP3	CP4
385.9609	82.4126	217.8186	8.3283	0.1564	-0.9877	0.0000	-0.19801	-0.11300	0.45957	0.06584
387.8985	82.7258	217.3028	9.6736	0.1647	-0.9863	0.0043	0.10807	0.16179	0.38586	0.24539
389.7552	83.0078	216.1161	8.9212	0.1340	-0.9910	-0.0021	0.18839	0.28446	0.48730	0.30984
392.1973	83.1760	214.1534	16.4212	0.0338	-0.9994	0.0021	0.24539	0.32738	0.61137	0.33978
394.8946	83.2657	211.9948	10.9266	0.0349	-0.9994	0.0000	0.13424	0.23005	0.51811	0.19752
396.8249	83.3331	210.5386	7.6188	0.0349	-0.9994	0.0000	0.12478	0.21978	0.55995	0.16887
398.2550	83.3831	209.5458	5.5178	0.0349	-0.9994	0.0000	0.12264	0.22102	0.56050	0.15701
399.3325	83.4207	208.8768	4.1605	0.0349	-0.9994	0.0000	0.11506	0.21687	0.56409	0.14241
400.1663	83.4498	208.4454	3.3097	0.0349	-0.9994	0.0000	0.11020	0.21332	0.56134	0.13001
400.8302	83.4730	208.1575	2.7637	0.0349	-0.9994	0.0000	0.10743	0.21185	0.56076	0.12379
401.4498	83.4947	207.8707	3.1957	0.0349	-0.9994	0.0000	0.10490	0.21071	0.55991	0.11918
402.1217	83.5181	207.5155	3.5321	0.0349	-0.9994	0.0000	0.10030	0.20765	0.55792	0.11149
402.8454	83.5434	207.1102	3.8404	0.0349	-0.9994	0.0000	0.09521	0.20375	0.55587	0.10208
403.6298	83.5708	206.6657	4.1635	0.0349	-0.9994	0.0000	0.08943	0.19892	0.55251	0.09118
404.4898	83.6003	206.1857	4.5456	0.0349	-0.9994	0.0000	0.08302	0.19300	0.54846	0.07836
405.4442	83.6341	205.6687	5.0018	0.0349	-0.9994	0.0000	0.07571	0.18591	0.54306	0.06407
406.5224	83.6715	205.1069	5.6274	0.0349	-0.9994	0.0000	0.06695	0.17671	0.53537	0.04801
407.7053	83.7151	204.4904	6.3884	0.0349	-0.9994	0.0000	0.05706	0.16612	0.52712	0.03021
409.2034	83.7655	203.8071	7.4159	0.0349	-0.9994	0.0000	0.04514	0.15276	0.51739	0.00918
410.9237	83.8254	203.0439	8.7364	0.0349	-0.9994	0.0000	0.03317	0.13821	0.51145	-0.01393
412.9940	83.8978	202.2028	10.3693	0.0349	-0.9994	0.0000	0.02021	0.11921	0.49754	-0.04251
415.5306	83.9863	201.3058	12.5099	0.0349	-0.9994	0.0000	0.00961	0.09915	0.48265	-0.07244
418.7141	84.0975	200.4059	15.3644	0.0349	-0.9994	0.0000	-0.00993	0.06772	0.43506	-0.11586
422.7459	84.2383	199.5855	18.7911	0.0349	-0.9994	0.0000	-0.03499	0.02965	0.40836	-0.16819
427.8429	84.4163	199.0494	22.6468	0.0349	-0.9994	0.0000	-0.08256	0.04460	0.36558	-0.24758
434.2447	84.6399	198.8538	27.0593	0.0349	-0.9994	0.0000	-0.12426	0.11907	0.35219	-0.30184
442.1165	84.9148	198.7779	31.5179	0.0349	-0.9994	0.0000	-0.14025	0.15359	0.36242	-0.29656
451.5075	85.2427	198.7051	35.5711	0.0349	-0.9994	0.0000	-0.14034	0.14833	0.34748	-0.25939
462.3198	85.6203	198.6361	38.6274	0.0349	-0.9994	0.0000	-0.13078	0.11951	0.30268	-0.20125
474.2533	86.0370	198.5741	40.1719	0.0349	-0.9994	0.0000	-0.11756	0.08354	0.24738	-0.13857
486.8060	86.4753	198.5225	39.8988	0.0349	-0.9994	0.0000	-0.10959	0.05709	0.18403	-0.10051
499.3655	86.9140	198.4739	37.7373	0.0349	-0.9994	0.0000	-0.11989	0.05751	0.07942	-0.09953
509.6034	87.2715	198.3242	22.5367	0.0349	-0.9994	0.0000	-0.12302	0.08501	0.11701	-0.11114
533.0700	87.9547	198.8530	14.2120	0.1564	-0.9877	0.0000	-0.16946	0.08549	0.36657	0.05729
569.0531	88.4338	222.0912	11.4913	0.1603	-0.9871	-0.0005	0.20583	0.25629	0.33540	0.33193
588.9658	88.8897	220.9321	9.4873	0.1492	-0.9888	0.0029	0.37012	0.47807	0.35580	0.42697
592.1607	83.1614	218.7207	14.7776	0.0337	-0.9994	-0.0080	0.37389	0.46796	0.47738	0.42176
595.2326	83.2777	216.3162	10.1835	0.0348	-0.9994	0.0001	0.23192	0.33681	0.32828	0.24879
597.2764	83.3489	214.7159	7.3683	0.0349	-0.9994	0.0000	0.19352	0.29594	0.34360	0.18573
598.7501	83.4004	213.6865	5.5579	0.0349	-0.9994	0.0000	0.18455	0.28799	0.34014	0.16723
599.8658	83.4394	212.0636	4.4147	0.0349	-0.9994	0.0000	0.16733	0.27290	0.33448	0.14449
600.7645	83.4707	212.7465	3.8052	0.0349	-0.9994	0.0000	0.15853	0.26384	0.32965	0.12928
601.5232	83.4972	212.5950	3.3171	0.0349	-0.9994	0.0000	0.15311	0.25904	0.32115	0.11829
602.2730	83.5234	212.0262	3.3666	0.0349	-0.9994	0.0000	0.14694	0.25294	0.31468	0.10640
603.1094	83.5526	212.0875	4.3650	0.0349	-0.9994	0.0000	0.13619	0.24231	0.30755	0.09022
604.0038	83.5838	211.5543	4.6813	0.0348	-0.9994	0.0000	0.12396	0.22973	0.30047	0.07180
604.9477	83.6168	211.0129	4.9544	0.0349	-0.9994	0.0000	0.11061	0.21580	0.29247	0.05213
605.9469	83.6517	210.4280	5.2511	0.0349	-0.9994	0.0000	0.09667	0.20096	0.28407	0.03164
607.0182	83.6891	209.8113	5.6098	0.0349	-0.9994	0.0000	0.08184	0.18499	0.27394	0.00989
608.1889	83.7300	209.1625	6.1102	0.0349	-0.9994	0.0000	0.06602	0.16748	0.26157	-0.01377
609.4938	83.7755	208.4753	6.7464	0.0349	-0.9994	0.0000	0.04919	0.14831	0.24820	-0.03922
610.9776	83.8273	207.7406	7.6112	0.0349	-0.9994	0.0000	0.03030	0.12599	0.23313	-0.06780
612.7001	83.8875	206.9487	8.7321	0.0349	-0.9994	0.0000	0.00962	0.10086	0.21774	-0.09888
614.7340	83.9585	206.1007	10.1414	0.0349	-0.9994	0.0000	-0.01523	0.07047	0.19066	-0.13481
617.1840	84.0441	205.2122	11.9872	0.0349	-0.9994	0.0000	-0.04323	0.03621	0.15050	-0.17392
620.2157	84.1500	204.3197	14.4519	0.0349	-0.9994	0.0000	-0.07843	0.00820	0.09340	-0.22354
624.0309	84.2832	203.4874	17.4160	0.0349	-0.9994	0.0000	-0.11596	0.05961	0.06420	-0.27920
628.8910	84.4529	202.8636	20.8025	0.0349	-0.9994	0.0000	-0.15979	0.12470	0.07546	-0.34555
635.1098	84.6701	202.4929	24.6095	0.0349	-0.9994	0.0000	-0.19471	0.18927	0.12735	-0.39609
642.8990	84.9421	202.2226	28.2012	0.0349	-0.9994	0.0000	-0.20775	0.22697	0.16963	-0.38575
652.3069	85.2706	201.9665	31.1573	0.0349	-0.9994	0.0000	-0.19699	0.22175	0.15678	-0.31793
663.2139	85.6515	201.7299	33.0769	0.0349	-0.9994	0.0000	-0.16998	0.18090	0.09395	-0.21448
675.2861	86.0731	201.5259	33.7154	0.0349	-0.9994	0.0000	-0.14209	0.13167	0.01014	-0.12998
687.9909	86.5138	201.3643	33.0434	0.0349	-0.9994	0.0000	-0.12442	0.09370	0.01558	-0.09261
500.6825	86.9600	201.2218	33.0446	0.0349	-0.9994	0.0000	-0.10405	0.06875	0.01830	-0.09431
511.5203	87.3368	201.0446	13.3330	0.0349	-0.9994	0.0000	-0.13330	0.12647	0.13009	-0.11536
520.7122	87.7320	200.8197	13.7610	0.1564	-0.9877	0.0000	-0.23749	0.13449	0.27280	0.01118
530.4152	88.1572	226.1551	14.7492	0.1566	-0.9877	-0.0001	0.12559	0.18421	0.31624	0.27883
537.2622	88.6316	225.3249	11.9813	0.1648	-0.9863	0.0032	0.35818	0.45836	0.33938	0.43344
591.0410	83.0608	223.3514	16.2525	0.0674	-0.9977	-0.0089	0.41099	0.50842	0.47438	0.46993
594.5096	83.2577	221.0667	11.2105	0.0318	-0.9995	0.0014	0.35550	0.46249	0.42001	0.37448
596.7637	83.3310	219.4771	8.1637	0.0349	-0.9994	0.0000	0.26390	0.37152	0.36852	0.25962
598.3391	83.3860	218.4762	6.1972	0.0349	-0.9994	0.0000	0.26374	0.37058	0.38342	0.24464
599.5063	83.4268	217.9135	4.9788	0.0349	-0.9994	0.0000	0.24184	0.35144	0.36961	0.21604
600.4364	83.4592	217.6817	4.3919	0.0349	-0.9994	0.0000	0.23306	0.34257	0.36916	0.19964
601.2424	83.4874	217.6201	4.0355	0.0348	-0.9994	0.0000	0.22799	0.33853	0.36673	0.18886
602.1047	83.5175	217.4620	4.9673	0.0349	-0.9994	0.0000	0.22074	0.33172	0.36544	0.17546
603.1271	83.5532	217.0738	5.5463	0.0349	-0.9994	0.0000	0.20577	0.31767	0.35978	0.15366
604.2484	83.5923	216.4995	5.8787	0.0349	-0.9994	0.0000	0.18717	0.29944	0.35292	0.12724
605.4297	83.6336	215.8065	6.0768	0.0349	-0.9994	0.0000	0.16628	0.27868	0.34474	0.09872
606.6568	83.6764	215.0508	6.2440	0.0349	-0.9994	0.0000	0.14450	0.25664	0.33624	0.06947
607.9351	83.7211	214.2654	6.4489	0.0349	-0.9994	0.0000	0.12215	0.23370	0.32702	0.03972
609.2861	83.7683	213.4624	6.7721	0.0349	-0.9994	0.0000	0.09928	0.20978	0.31687	0.00931
610.7422	83.8191	212.6416	7.2283	0.0349	-0.9994	0.0000	0.07561	0.18460	0.30660	-0.02206
612.3462	83.8751	211.7963	7.8936	0.0349	-0.9994	0.0000	0.05072	0.15706	0.29537	-0.05772
614.1550	83.9363	210.9183	8.7651	0.0349	-0.9994	0.0000	0.02332	0.12743	0.28256	-0.09474
616.2398	84.0111	210.0059	9.9587	0.0349	-0.9994	0.0000	-0.00607	0.09419	0.26000	-0.13174
618.6997	84.0970	209.0671	11.5198	0.0349	-0.9994	0.0000	-0.03701	0.05759	0.22984	-0.17573
621.6871	84.2013	208.1248	13.6167	0.0349	-0.9994	0.0000	-0.07140	0.01330	0.20489	-0.22848
625.4032	84.3311	207.2226	16.2213	0.0349	-0.9994	0.0000	-0.10854	-0.03943	0.22663	-0.28912
630.1257	84.4960	206.4576	19.3373	0						



385.5902	82.3632	229.6515	14.8949	0.1614	-0.9869	0.0006	0.37210	0.45786	0.37530	0.45912
389.6640	82.9309	228.1110	18.7449	0.1225	-0.9924	0.0090	0.42104	0.51911	0.41647	0.49844
393.3024	83.2272	226.2423	13.1682	0.0226	-0.9997	-0.0006	0.48593	0.58725	0.53575	0.51752
395.6973	83.2937	224.8613	9.6690	0.0349	-0.9994	0.0000	0.35421	0.45952	0.41051	0.36054
397.3603	83.3518	223.9723	7.3544	0.0349	-0.9994	0.0000	0.36663	0.47253	0.44833	0.35330
398.5795	83.3944	223.4805	5.8991	0.0349	-0.9994	0.0000	0.34115	0.45054	0.43375	0.32127
399.5417	83.4280	223.3015	5.1906	0.0349	-0.9994	0.0000	0.33423	0.44391	0.43664	0.30508
400.3827	83.4574	223.2751	4.8427	0.0348	-0.9994	0.0000	0.32980	0.44123	0.43754	0.29519
401.3207	83.4901	223.1109	6.0514	0.0349	-0.9994	0.0000	0.32166	0.43430	0.43796	0.28074
402.4777	83.5305	222.6472	6.7527	0.0349	-0.9994	0.0000	0.30255	0.41777	0.43204	0.25272
403.7821	83.5761	221.9214	7.0903	0.0349	-0.9994	0.0000	0.27648	0.39410	0.42407	0.21652
405.1778	83.6248	221.0213	7.2185	0.0349	-0.9994	0.0000	0.24555	0.36540	0.41203	0.17617
406.6318	83.6756	220.0328	7.2676	0.0349	-0.9994	0.0000	0.21236	0.33376	0.39764	0.13321
408.1336	83.7280	219.0149	7.3277	0.0349	-0.9994	0.0000	0.17868	0.30085	0.38227	0.08988
409.6932	83.7825	217.9963	7.4826	0.0349	-0.9994	0.0000	0.14499	0.26716	0.36538	0.04650
411.3360	83.8399	216.9844	7.7644	0.0349	-0.9994	0.0000	0.11119	0.23255	0.34782	0.00281
413.1008	83.9015	215.9844	8.2378	0.0349	-0.9994	0.0000	0.07644	0.19596	0.32837	-0.04250
415.0421	83.9693	215.9751	8.9382	0.0349	-0.9994	0.0000	0.04057	0.15708	0.30770	-0.08992
417.2299	84.0457	214.9588	9.9128	0.0349	-0.9994	0.0000	0.00244	0.11407	0.28447	-0.14130
419.7618	84.1341	212.8866	11.2544	0.0349	-0.9994	0.0000	-0.03825	0.06613	0.26830	-0.19723
422.7829	84.2396	211.8408	13.0926	0.0349	-0.9994	0.0000	-0.08349	0.00991	0.27847	-0.26268
426.4944	84.3692	210.8172	15.4664	0.0349	-0.9994	0.0000	-0.13252	-0.05722	0.34257	-0.33767
431.1820	84.5329	209.8767	18.4316	0.0349	-0.9994	0.0000	-0.18444	-0.13512	0.45060	-0.41852
437.2232	84.7439	209.0437	21.9338	0.0349	-0.9994	0.0000	-0.22974	-0.21320	0.54866	-0.48490
444.9551	85.0139	208.2680	25.3588	0.0349	-0.9994	0.0000	-0.25013	-0.26266	0.57056	-0.47716
454.5130	85.3477	207.5326	29.9867	0.0349	-0.9994	0.0000	-0.23577	-0.25522	0.49519	-0.38349
465.7595	85.7404	206.8743	35.4011	0.0349	-0.9994	0.0000	-0.20063	-0.20033	0.35201	-0.24026
478.2911	86.1781	205.3404	42.6103	0.0349	-0.9994	0.0000	-0.16792	-0.14948	0.18989	-0.14217
491.4942	86.6393	205.9577	50.8266	0.0349	-0.9994	0.0000	-0.14941	-0.10738	0.03890	-0.10851
504.5626	87.0955	205.7089	59.2759	0.0349	-0.9994	0.0000	-0.14698	-0.10735	0.12359	-0.11377
515.9861	87.4944	205.6392	68.1215	0.0349	-0.9994	0.0000	-0.29537	-0.17017	0.19806	-0.12674
529.2444	88.0715	204.4693	77.4400	0.0349	-0.9994	0.0000	0.04829	0.12304	0.28727	-0.06632
545.8568	88.7458	203.4697	87.3697	0.0349	-0.9994	0.0000	0.38327	0.46097	0.40516	-0.22865
564.2517	89.5122	202.0888	98.0097	0.0349	-0.9994	0.0000	0.45323	0.54782	0.43132	-0.27864
584.1601	90.3844	200.4442	109.0097	0.0349	-0.9994	0.0000	0.57628	0.66786	0.59829	-0.21688
605.5709	91.3633	200.7738	120.2019	0.0349	-0.9994	0.0000	0.46488	0.56064	0.47175	-0.48290
628.4996	92.4567	200.1164	131.5500	0.0349	-0.9994	0.0000	0.48307	0.58064	0.51107	-0.47839
653.4896	93.6711	200.7446	143.8243	0.0349	-0.9994	0.0000	0.46300	0.56447	0.50119	-0.45115
679.4887	95.0111	200.6119	156.9307	0.0349	-0.9994	0.0000	0.45963	0.56177	0.50543	-0.43714
707.3502	96.4213	200.3378	170.4445	0.0349	-0.9994	0.0000	0.45624	0.56050	0.50826	-0.42763
736.3164	97.9551	200.3378	184.4418	0.0349	-0.9994	0.0000	0.44818	0.55415	0.50921	-0.41135
766.5162	99.5969	200.3378	200.3378	0.0349	-0.9994	0.0000	0.42675	0.53667	0.50567	-0.37951
798.8927	101.4550	200.3378	217.7864	0.0349	-0.9994	0.0000	0.39513	0.50941	0.49555	-0.33581
833.3991	103.5976	200.3378	237.9187	0.0349	-0.9994	0.0000	0.35482	0.47386	0.48075	-0.28316
870.0004	106.0535	200.3378	257.9566	0.0349	-0.9994	0.0000	0.30916	0.43249	0.46123	-0.22519
908.6757	108.7120	200.3378	277.9835	0.0349	-0.9994	0.0000	0.26090	0.38761	0.43988	-0.16498
949.4212	111.5730	200.3378	300.0719	0.0349	-0.9994	0.0000	0.21183	0.34077	0.41617	-0.10421
992.2499	114.5368	200.3378	323.6185	0.0349	-0.9994	0.0000	0.16312	0.29300	0.38189	-0.04421
1037.1911	117.6047	200.3378	348.6185	0.0349	-0.9994	0.0000	0.11706	0.24395	0.36652	-0.01591
1084.2927	120.7811	200.3378	375.1857	0.0349	-0.9994	0.0000	0.06588	0.19317	0.34491	-0.07691
1133.6216	124.0594	200.3378	403.2123	0.0349	-0.9994	0.0000	0.01569	0.13875	0.33417	-0.14079
1185.2741	127.5582	200.3378	432.7157	0.0349	-0.9994	0.0000	-0.03649	0.07971	0.35235	-0.20849
1239.3928	131.2828	200.3378	463.7554	0.0349	-0.9994	0.0000	-0.09242	0.01259	0.41609	-0.28473
1295.1816	135.2525	200.3378	496.3928	0.0349	-0.9994	0.0000	-0.15100	-0.06459	0.53254	-0.37096
1352.6336	139.4845	200.3378	530.6612	0.0349	-0.9994	0.0000	-0.20975	-0.15080	0.67117	-0.45955
1411.7840	143.9845	200.3378	566.5578	0.0349	-0.9994	0.0000	-0.25911	-0.23408	0.76605	-0.53282
1472.5430	148.7525	200.3378	604.0463	0.0349	-0.9994	0.0000	-0.27937	-0.28522	0.75893	-0.52446
1534.8840	153.7882	200.3378	643.3865	0.0349	-0.9994	0.0000	-0.25901	-0.27256	0.64147	-0.41377
1598.8244	159.0639	200.3378	683.8265	0.0349	-0.9994	0.0000	-0.21670	-0.20883	0.45902	-0.24812
1664.2622	164.5985	200.3378	725.3865	0.0349	-0.9994	0.0000	-0.18007	-0.14441	0.26797	-0.14694
1731.2622	170.3865	200.3378	769.0776	0.0349	-0.9994	0.0000	-0.16099	-0.11330	0.09459	-0.11772
1799.9671	176.4018	200.3378	814.9117	0.0349	-0.9994	0.0000	-0.15790	-0.11441	-0.07293	-0.12396
1869.3025	182.5792	200.3378	862.7949	0.0349	-0.9994	0.0000	-0.15126	-0.12510	-0.18128	-0.13030
1939.2653	188.9018	200.3378	912.7949	0.0349	-0.9994	0.0000	-0.12955	-0.16982	-0.08568	-0.06902
2009.8386	195.3865	200.3378	964.9117	0.0349	-0.9994	0.0000	-0.03267	-0.11527	0.29012	0.21723
2081.0150	202.0321	200.3378	1019.3878	0.0349	-0.9994	0.0000	0.39818	0.47384	0.42491	0.50100
2152.7948	208.8888	200.3378	1076.1103	0.0349	-0.9994	0.0000	0.49468	0.58153	0.46591	0.58865
2224.5797	215.9117	200.3378	1135.0798	0.0349	-0.9994	0.0000	0.59207	0.69307	0.59171	0.69450
2296.3646	223.0903	200.3378	1196.3025	0.0349	-0.9994	0.0000	0.69452	0.80704	0.65324	0.80356
2368.1500	230.4237	200.3378	1259.8843	0.0349	-0.9994	0.0000	0.80704	0.92180	0.76421	0.91133
2439.9349	237.9117	200.3378	1325.7157	0.0349	-0.9994	0.0000	0.92180	1.03704	0.87810	1.01913
2511.7198	245.4237	200.3378	1393.7949	0.0349	-0.9994	0.0000	1.03704	1.15210	0.99201	1.12627
2583.5048	253.0903	200.3378	1464.0776	0.0349	-0.9994	0.0000	1.15210	1.26716	1.10692	1.23396
2655.2897	260.8265	200.3378	1536.7612	0.0349	-0.9994	0.0000	1.26716	1.38222	1.22198	1.34172
2727.0746	268.6333	200.3378	1611.8441	0.0349	-0.9994	0.0000	1.38222	1.49728	1.33704	1.44948
2798.8595	276.4444	200.3378	1688.3265	0.0349	-0.9994	0.0000	1.49728	1.61234	1.45210	1.55724
2870.6444	284.2555	200.3378	1766.2103	0.0349	-0.9994	0.0000	1.61234	1.72740	1.56716	1.66494
2942.4293	292.0666	200.3378	1846.1103	0.0349	-0.9994	0.0000	1.72740	1.84246	1.68222	1.77260
3014.2142	299.8777	200.3378	1928.0103	0.0349	-0.9994	0.0000	1.84246	1.95752	1.79728	1.88026
3086.0000	307.6888	200.3378	2011.9103	0.0349	-0.9994	0.0000	1.95752	2.07258	1.91234	1.98792
3157.7849	315.4999	200.3378	2097.8103	0.0349	-0.9994	0.0000	2.07258	2.18764	2.02740	2.09558
3229.5698	323.3110	200.3378	2185.7103	0.0349	-0.9994	0.0000	2.18764	2.30270	2.14246	2.20324
3301.3547	331.1221	200.3378	2275.6103	0.0349	-0.9994	0.0000	2.30270	2.41776	2.25752	2.31090
3373.1396	338.9332	200.3378	2367.5103	0.0349	-0.9994	0.0000	2.41776	2.53282	2.37258	2.41856
3444.9245	346.7443	200.3378	2461.4103	0.0349	-0.9994	0.0000	2.53282	2.64788	2.48764	2.52622
3516.7094	354.5554	200.3378	2557.3103	0.0349	-0.9994	0.0000	2.64788	2.76294	2.60270	2.63388
3588.4943	362.3665	200.3378	2655.2103	0.0349	-0.9994	0.0000	2.76294	2.87800	2.71752	2.74154
3660.2792	370.1776	200.3378	2755.1103	0.0349	-0.9994	0.0000	2.87800	2.99306	2.83264	2.84920
3732.0641	377.9887	200.3378	2857.0103	0.0349	-0.9994	0.0000	2.99306	3.10812	2.94780	2.95686
3803.8490	385.7998	200.3378	2960.9103	0.0349	-0.9994	0.0000	3.10812	3.22318	3.06286	3.06452
3875.6339	393.6109	200.3378	3066.81							

398.8369	83.4034	242.4130	4.6503	0.0349	-0.9994	0.0000	0.71669	0.79210	0.64544	0.71791
399.6459	83.4317	241.9051	5.2312	0.0349	-0.9994	0.0000	0.70947	0.78852	0.64922	0.70060
400.5559	83.4634	241.0083	5.6586	0.0348	-0.9994	0.0000	0.69289	0.77776	0.65790	0.67030
401.5938	83.4997	239.7636	6.0485	0.0349	-0.9994	0.0000	0.66194	0.75373	0.65235	0.62330
402.7950	83.5416	238.2589	6.4351	0.0349	-0.9994	0.0000	0.62042	0.72047	0.64628	0.56399
404.1803	83.5900	236.5929	6.8318	0.0349	-0.9994	0.0000	0.56468	0.67394	0.62588	0.49082
405.7537	83.6449	234.8514	7.2423	0.0349	-0.9994	0.0000	0.50126	0.61980	0.60408	0.41048
407.5127	83.7063	233.0928	7.6863	0.0349	-0.9994	0.0000	0.42767	0.55555	0.57180	0.32091
409.4572	83.7742	231.3488	8.1786	0.0349	-0.9994	0.0000	0.34974	0.48558	0.53976	0.22644
411.5981	83.8490	229.6342	8.7657	0.0349	-0.9994	0.0000	0.26638	0.40892	0.50544	0.12748
413.9633	83.9316	227.9497	9.4932	0.0349	-0.9994	0.0000	0.17994	0.32697	0.48216	0.02520
416.6028	84.0238	226.2891	10.4294	0.0349	-0.9994	0.0000	0.09119	0.23973	0.48505	-0.07967
419.5994	84.1284	224.6419	11.6758	0.0349	-0.9994	0.0000	0.00200	0.14773	0.53972	-0.18616
423.0863	84.2502	222.9961	13.3761	0.0349	-0.9994	0.0000	-0.08870	0.04781	0.65684	-0.29708
427.2677	84.3962	221.3435	15.6668	0.0349	-0.9994	0.0000	-0.17901	-0.06240	0.82242	-0.41814
432.4435	84.5770	219.6920	18.6503	0.0349	-0.9994	0.0000	-0.26304	-0.17894	0.98626	-0.53426
439.0137	84.8064	218.0547	22.7106	0.0349	-0.9994	0.0000	-0.32691	-0.28510	1.07138	-0.62697
447.3705	85.0982	216.4474	28.7320	0.0349	-0.9994	0.0000	-0.34566	-0.34701	1.01004	-0.62438
457.7020	85.4590	214.9319	36.4002	0.0349	-0.9994	0.0000	-0.30835	-0.32288	0.80813	-0.47323
469.8790	85.8843	213.6215	46.8598	0.0349	-0.9994	0.0000	-0.24754	-0.23589	0.54179	-0.25792
483.4807	86.3595	212.6340	60.2925	0.0349	-0.9994	0.0000	-0.20174	-0.16080	0.29193	-0.15422
497.8355	86.8608	212.0524	80.0091	0.0349	-0.9994	0.0000	-0.18147	-0.13239	0.08119	-0.13373
511.9276	87.3528	211.9759	108.4611	0.0349	-0.9994	0.0000	-0.17622	-0.13584	-0.10609	-0.14200
523.5802	87.7596	212.6062	149.9658	0.0349	-0.9994	0.0000	-0.15613	-0.13454	-0.25017	-0.13555
530.7352	88.0010	245.7328	22.4208	0.1564	-0.9877	0.0000	-0.28878	-0.15366	-0.01613	-0.05238
537.4753	81.0686	246.6593	20.9134	0.1564	-0.9877	0.0000	0.04407	0.13713	0.25302	0.24140
543.8991	82.0991	247.0115	19.8335	0.1605	-0.9870	0.0007	0.45847	0.53243	0.38936	0.58492
549.2495	82.9006	247.1974	16.0984	0.1319	-0.9912	-0.0086	0.60984	0.68038	0.50815	0.72272
553.0228	83.2287	247.4047	11.0185	0.0149	-0.9998	0.0103	0.74216	0.80502	0.61334	0.83606
557.4758	83.2860	247.6232	7.7602	0.0349	-0.9994	0.0000	0.72836	0.78808	0.58052	0.78998
561.1274	83.3437	247.7875	5.6492	0.0349	-0.9994	0.0000	0.78200	0.84253	0.62724	0.83566
564.3028	83.3848	247.8588	4.4396	0.0349	-0.9994	0.0000	0.79074	0.85555	0.64501	0.84221
567.2362	83.4173	247.8058	4.0799	0.0349	-0.9994	0.0000	0.80252	0.87148	0.65634	0.84857
570.9817	83.4434	247.5140	3.4795	0.0349	-0.9994	0.0000	0.80960	0.88344	0.68484	0.84968
574.5929	83.4648	246.8933	3.6310	0.0349	-0.9994	0.0000	0.80107	0.87811	0.68636	0.82845
578.2086	83.4862	245.9546	3.8883	0.0349	-0.9994	0.0000	0.79274	0.87499	0.70885	0.80372
581.9040	83.5105	244.7267	4.2633	0.0349	-0.9994	0.0000	0.76573	0.85378	0.70616	0.75690
585.7499	83.5401	243.2640	4.7252	0.0349	-0.9994	0.0000	0.73503	0.83079	0.71554	0.70523
589.7958	83.5765	241.6315	5.2551	0.0349	-0.9994	0.0000	0.68391	0.78918	0.70131	0.63195
593.9685	83.6210	239.8921	6.8385	0.0349	-0.9994	0.0000	0.62686	0.74226	0.69037	0.55363
598.5819	83.6738	238.0926	9.4845	0.0349	-0.9994	0.0000	0.55254	0.67962	0.66230	0.45968
603.3470	83.7355	236.2602	12.2041	0.0349	-0.9994	0.0000	0.46955	0.60770	0.63274	0.35684
608.3623	83.8065	234.4106	16.0451	0.0349	-0.9994	0.0000	0.37504	0.52375	0.59706	0.24494
613.7210	83.8882	232.5484	20.0448	0.0349	-0.9994	0.0000	0.27239	0.42377	0.56987	0.12505
619.4162	83.9823	230.6723	25.2684	0.0349	-0.9994	0.0000	0.16203	0.32527	0.56536	-0.00207
625.5909	84.0818	228.7780	32.7889	0.0349	-0.9994	0.0000	0.04870	0.21281	0.60821	-0.13351
632.3551	84.1912	226.8596	42.7551	0.0349	-0.9994	0.0000	-0.06609	0.09063	0.71056	-0.26814
639.7251	84.3173	224.9149	55.7811	0.0349	-0.9994	0.0000	-0.17803	0.04198	0.86270	-0.41154
647.2462	84.45701	222.9546	72.4743	0.0349	-0.9994	0.0000	-0.27937	-0.17965	1.01532	-0.54951
655.9145	84.6127	221.0004	93.0434	0.0349	-0.9994	0.0000	-0.35309	-0.30226	1.08961	-0.65781
664.9378	85.1181	219.0878	119.5626	0.0349	-0.9994	0.0000	-0.37086	-0.37135	1.01865	-0.66243
674.5664	85.4924	217.3037	159.2702	0.0349	-0.9994	0.0000	-0.32447	-0.34133	0.80506	-0.49425
684.2336	85.9316	215.7861	208.8762	0.0349	-0.9994	0.0000	-0.25498	-0.24459	0.52830	-0.25579
694.2665	86.4219	214.6763	268.5631	0.0349	-0.9994	0.0000	-0.20619	-0.16486	0.27371	-0.15471
704.0874	86.9395	214.0827	331.5543	0.0349	-0.9994	0.0000	-0.18630	-0.13865	0.06008	-0.13865
714.6383	87.4474	214.1358	399.7891	0.0349	-0.9994	0.0000	-0.18058	-0.14364	-0.13112	-0.14800
725.2754	87.8537	214.9826	468.5542	0.0349	-0.9994	0.0000	-0.15802	-0.13854	-0.29059	-0.13742
736.3355	79.9378	248.9043	537.5719	0.1564	-0.9877	0.0000	-0.29150	-0.15404	-0.07711	-0.05208
747.6099	81.0899	249.6555	606.4250	0.1564	-0.9877	0.0000	-0.06038	0.15423	0.22158	0.26495
758.6704	82.2247	250.0941	675.0705	0.1611	-0.9869	-0.0009	0.49267	0.56560	0.34778	0.63002
769.4680	83.0113	250.4591	743.8515	0.0961	-0.9953	-0.0085	0.66897	0.73178	0.52633	0.78885
780.4137	83.2714	250.8528	812.0221	0.0208	-0.9998	-0.0013	0.76806	0.82697	0.58171	0.70765
791.0455	83.3409	251.2356	880.0009	0.0349	-0.9994	0.0000	0.78273	0.84059	0.58617	0.87318
802.8267	83.4031	251.5203	948.1336	0.0349	-0.9994	0.0000	0.82683	0.89205	0.62051	0.92584
814.0632	83.4462	251.6561	1016.1330	0.0348	-0.9994	0.0000	0.84055	0.91379	0.65091	0.94944
825.9993	83.4789	251.6062	1084.3493	0.0349	-0.9994	0.0000	0.85108	0.92554	0.64666	0.95737
837.6433	83.5016	251.5093	1152.7990	0.0349	-0.9994	0.0000	0.87191	0.94916	0.69717	0.96733
849.4966	83.5277	250.5822	1221.2920	0.0349	-0.9994	0.0000	0.86131	0.93887	0.68963	0.93740
861.3960	83.5577	249.6809	1290.4423	0.0350	-0.9994	0.0000	0.86586	0.94777	0.72187	0.92447
873.2887	83.5841	248.5597	1359.7557	0.0348	-0.9994	0.0000	0.84061	0.92635	0.72789	0.87147
885.2304	83.5596	247.2436	1429.2097	0.0349	-0.9994	0.0000	0.82339	0.91584	0.75373	0.83259
897.1618	83.5843	245.7650	1498.7517	0.0348	-0.9994	0.0000	0.77835	0.88007	0.74710	0.75986
909.1011	83.6171	244.1622	1568.3742	0.0349	-0.9994	0.0000	0.73115	0.84294	0.74913	0.68647
921.0416	83.6589	242.4645	1638.0875	0.0349	-0.9994	0.0000	0.66312	0.78715	0.73155	0.59331
933.0032	83.7107	240.6867	1707.9051	0.0349	-0.9994	0.0000	0.58277	0.71943	0.71037	0.48682
944.9847	83.7737	238.8385	1777.8926	0.0349	-0.9994	0.0000	0.48516	0.63486	0.67927	0.36533
956.9863	83.8496	236.9189	1847.9962	0.0349	-0.9994	0.0000	0.37359	0.53511	0.65109	0.23082
968.9999	83.9410	234.9246	1918.5949	0.0349	-0.9994	0.0000	0.24484	0.41608	0.63494	0.07932
980.9999	84.0515	232.8517	1989.4687	0.0349	-0.9994	0.0000	0.10646	0.28253	0.65247	-0.08287
992.9999	84.1860	230.6990	2060.8313	0.0349	-0.9994	0.0000	-0.03839	0.13335	0.71291	-0.25138
1004.9999	84.3515	228.4751	2132.7382	0.0349	-0.9994	0.0000	-0.17927	-0.02798	0.81507	-0.42368
1016.9999	84.5571	226.2047	2204.1825	0.0349	-0.9994	0.0000	-0.30304	-0.19119	0.91963	-0.58359
1028.9999	84.8145	223.9304	2275.9625	0.0349	-0.9994	0.0000	-0.39018	-0.33244	0.96097	-0.70472
1040.9999	85.1347	221.7158	2347.5858	0.0349	-0.9994	0.0000	-0.40737	-0.40894	0.87961	-0.71414
1052.9999	85.5235	219.6751	2419.5991	0.0349	-0.9994	0.0000	-0.35094	-0.37162	0.67884	-0.52858
1064.9999	85.9771	217.9700	2491.5991	0.0349	-0.9994	0.0000	-0.27152	-0.26180	0.43120	-0.26531
1076.9999	86.4821	216.7834	2563.5991	0.0349	-0.9994	0.0000	-0.21994	-0.17770	0.20317	-0.16740
1088.9999	87.0163	215.1883	2635.5991	0.0349	-0.9994	0.0001	-0.20099	-0.14468	0.00536	-0.15494
1100.9999	87.5412	213.3858	2707.5991	0.0349	-0.9994	0.0000	-0.19388	-0.15935	-0.17931	-0.16271
1112.9999	87.9477	211.4071	2779.5866	0.0349	-0.9994	0.0000	-0.16273	-0.14400	-0.33139	-0.13986
1124.9999	89.9281	252.1032	2851.0153							



406.3749	83.6667	245.8997	4.0060	0.0349	-0.9994	0.0000	0.78481	0.88084	0.81033	0.70515
407.5995	83.7094	244.2810	4.7976	0.0349	-0.9994	0.0000	0.70953	0.81773	0.79509	0.59947
409.1558	83.7637	242.5149	5.7875	0.0349	-0.9994	0.0000	0.61339	0.73483	0.76509	0.47469
411.1142	83.8321	240.6509	7.0296	0.0349	-0.9994	0.0000	0.49998	0.63479	0.73149	0.33604
413.5692	83.9178	238.6577	8.6272	0.0349	-0.9994	0.0000	0.36040	0.50903	0.69616	0.17491
416.6490	84.0254	236.5254	10.6771	0.0349	-0.9994	0.0000	0.20337	0.36348	0.67698	-0.00310
420.5248	84.1608	234.2492	13.3147	0.0349	-0.9994	0.0000	0.03093	0.19493	0.67625	-0.19548
425.4139	84.3315	231.8416	16.5777	0.0349	-0.9994	0.0000	-0.14196	0.00919	0.69882	-0.39594
431.5755	84.5466	229.3379	20.4040	0.0349	-0.9994	0.0000	-0.29477	-0.17953	0.72115	-0.58253
439.2998	84.8164	226.8047	24.5555	0.0349	-0.9994	0.0000	-0.40144	-0.34116	0.70041	-0.72166
448.8494	85.1499	224.3394	28.6267	0.0349	-0.9994	0.0000	-0.42240	-0.42628	0.60733	-0.73868
460.3550	85.5517	222.0891	32.2041	0.0349	-0.9994	0.0000	-0.36013	-0.38389	0.44944	-0.54212
473.7172	86.0183	220.2404	35.0139	0.0349	-0.9994	0.0000	-0.27467	-0.26536	0.26776	-0.26203
488.5658	86.5372	218.9774	36.9828	0.0349	-0.9994	0.0000	-0.22206	-0.17944	0.09642	-0.16759
504.2470	87.0848	218.4515	37.8988	0.0349	-0.9994	0.0000	-0.20426	-0.15917	-0.06273	-0.15891
519.7457	87.6257	218.7878	35.9939	0.0349	-0.9994	0.0000	-0.19778	-0.16487	-0.22373	-0.16692
531.5228	88.0369	219.9117	18.0849	0.0349	-0.9994	0.0000	-0.16653	-0.14808	-0.37070	-0.14106
537.3735	79.9438	225.3568	26.1707	0.1564	-0.9877	0.0000	-0.29294	-0.14978	-0.12844	-0.04080
378.2714	81.1947	255.5113	23.6541	0.1564	-0.9877	-0.0038	0.53249	0.60618	0.30821	0.68972
386.1498	82.4473	255.6473	21.2585	0.1577	-0.9875	-0.0084	0.71181	0.77174	0.52175	0.87017
392.4562	83.1691	255.7696	17.4712	0.0347	-0.9994	-0.0002	0.75940	0.82510	0.49310	0.90743
396.5454	83.3236	255.8924	7.3267	0.0349	-0.9994	0.0000	0.80060	0.87067	0.54174	0.98142
399.4844	83.4260	256.0743	4.5923	0.0349	-0.9994	0.0000	0.83434	0.89500	0.52594	1.03543
401.5941	83.4997	256.1390	2.8813	0.0349	-0.9994	0.0000	0.86991	0.90271	0.51291	1.08671
403.1022	83.5524	256.2051	1.9338	0.0349	-0.9994	0.0000	0.86901	0.88143	0.42703	1.08409
404.1912	83.5904	256.1905	1.5701	0.0349	-0.9994	0.0000	0.90177	0.91598	0.49206	1.13500
404.7181	83.6088	255.8041	1.1344	0.0349	-0.9994	0.0000	0.92552	0.93483	0.50969	1.07463
404.8356	83.6129	255.0402	1.1218	0.0349	-0.9994	0.0000	0.95986	0.97334	0.59417	1.08936
404.9584	83.6171	254.1696	1.2874	0.0349	-0.9994	0.0000	0.97332	0.99003	0.64699	1.02874
405.1364	83.6234	253.1975	1.5852	0.0349	-0.9994	0.0000	0.98322	1.00570	0.71679	0.99194
405.4240	83.6334	252.1281	1.9685	0.0349	-0.9994	0.0000	0.96744	0.99794	0.76119	0.92180
405.8482	83.6482	250.9567	2.4169	0.0349	-0.9994	0.0000	0.93412	0.97517	0.80380	0.83681
406.4479	83.6692	249.6858	2.9340	0.0349	-0.9994	0.0000	0.87649	0.93104	0.82096	0.73974
407.2655	83.6978	248.3124	3.5494	0.0349	-0.9994	0.0000	0.79772	0.86835	0.82430	0.62451
408.3381	83.7352	246.8237	4.2505	0.0349	-0.9994	0.0000	0.68684	0.77776	0.80174	0.48182
409.7264	83.7837	245.2126	5.1470	0.0349	-0.9994	0.0000	0.58990	0.67046	0.76564	0.33100
411.5150	83.8461	243.4601	6.2898	0.0349	-0.9994	0.0000	0.39581	0.53039	0.70615	0.15187
413.8136	83.9264	241.5491	7.7822	0.0349	-0.9994	0.0000	0.21648	0.37126	0.64296	-0.03869
416.7685	84.0295	239.4647	9.7351	0.0349	-0.9994	0.0000	0.01811	0.18464	0.56713	-0.24512
420.5710	84.1624	237.1967	12.3032	0.0349	-0.9994	0.0000	-0.17579	-0.01724	0.49322	-0.45333
425.4594	84.3331	234.7552	15.8846	0.0349	-0.9994	0.0000	-0.34265	-0.21794	0.41608	-0.64373
431.7017	84.5511	232.1763	19.6126	0.0349	-0.9994	0.0000	-0.45770	-0.38851	0.32264	-0.78263
439.5765	84.8261	229.5379	24.3025	0.0349	-0.9994	0.0000	-0.47359	-0.47624	0.21939	-0.79896
449.3180	85.1663	226.9615	29.4123	0.0349	-0.9994	0.0000	-0.40066	-0.42584	0.11219	-0.58764
461.0361	85.5754	224.6210	34.5763	0.0349	-0.9994	0.0000	-0.30388	-0.29326	0.01305	-0.28543
474.6249	86.0500	222.7258	39.3070	0.0349	-0.9994	0.0000	-0.24823	-0.20329	-0.08195	-0.19585
489.7047	86.5771	221.4779	43.0955	0.0350	-0.9994	0.0001	-0.23138	-0.18673	-0.18741	-0.18743
505.6160	87.1327	221.0390	45.2897	0.0348	-0.9994	0.0000	-0.22361	-0.19128	-0.31398	-0.19207
521.4549	87.6854	221.4953	44.2675	0.0349	-0.9994	0.0000	-0.19123	-0.17061	-0.43991	-0.15688
533.6894	88.1126	222.5692	22.2800	0.0349	-0.9994	0.0000				

# pylon for lower

X	Y	Z	AREA	EX	EY	EZ	CP1	CP2	CP3	CP4
405.3627	68.3502	256.6330	2.0040	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
405.4151	68.6229	255.8682	1.784	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
405.5196	68.9078	255.0304	1.5421	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
405.7002	69.2071	254.1197	1.313	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
405.9826	69.5202	253.1314	1.0166	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
406.3811	69.8480	252.0550	0.7482	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
406.9232	70.1897	249.8836	0.4662	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
407.6604	70.5430	248.6075	0.2305	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
408.6321	70.9074	246.6731	0.0775	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
409.9026	71.2810	244.9804	0.142	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
411.5677	71.6579	243.1127	0.1897	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
413.7437	72.0315	241.0548	0.238	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
416.5834	72.3918	238.7950	0.287	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
420.2834	72.7203	236.3467	0.337	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
425.0878	73.0332	233.7420	0.387	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
431.2674	73.3093	231.0654	0.437	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
439.1040	73.4744	228.4477	0.487	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
448.8271	73.4844	226.0655	0.537	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
460.5381	73.3740	224.1383	0.587	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
474.1279	73.2362	222.8721	0.637	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
489.2098	73.1399	222.4322	0.687	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
505.1216	73.1260	222.8836	0.737	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
521.0338	73.1841	224.1265	0.787	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
535.8879	73.2614	225.6283	0.837	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
545.3636	71.0516	225.8536	0.887	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
545.4171	71.2776	225.0065	0.937	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
545.5241	71.5141	224.0867	0.987	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
545.7089	71.7631	223.0899	1.037	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
545.9969	72.0242	222.0058	1.087	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
546.4022	72.2982	220.8281	1.137	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
546.9530	72.5847	219.5471	1.187	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
547.6997	72.8822	218.1444	1.237	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
548.6813	73.1904	216.6075	1.287	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
549.9626	73.5084	214.9451	1.337	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
551.6384	73.8318	213.1675	1.387	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
553.8741	74.1661	211.2849	1.437	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
556.5711	74.5111	209.3073	1.487	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
559.8333	74.7771	207.2393	1.537	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
563.6655	75.0652	205.0913	1.587	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
568.0791	75.3381	202.8637	1.637	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
573.0851	75.5322	200.5661	1.687	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
578.6931	75.6137	198.2085	1.737	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
584.9031	75.6125	195.7909	1.787	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
591.7285	75.6044	193.3133	1.837	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
599.1699	75.6435	190.7757	1.887	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
607.2366	75.7577	188.1781	1.937	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
615.9530	75.9320	185.5205	1.987	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
625.3266	76.0985	182.8029	2.037	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
635.3643	76.2597	180.0253	2.087	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
646.0644	76.4191	177.1877	2.137	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
657.4284	76.5777	174.2901	2.187	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
669.4671	76.7352	171.3325	2.237	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
682.1917	76.8917	168.3149	2.287	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
695.6122	76.9108	165.2373	2.337	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
709.7386	76.9108	162.1097	2.387	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
724.5810	76.9108	158.9321	2.437	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
740.1495	76.9108	155.7045	2.487	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
756.4530	76.9108	152.4269	2.537	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
773.5015	76.9108	149.0993	2.587	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
791.2950	76.9108	145.7217	2.637	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
809.8435	76.9108	142.2941	2.687	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
829.1520	76.9108	138.8165	2.737	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
849.2305	76.9108	135.2889	2.787	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
870.0890	76.9108	131.7113	2.837	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
891.7375	76.9108	128.0837	2.887	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
914.1860	76.9108	124.4061	2.937	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
937.4345	76.9108	120.6785	2.987	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
961.4830	76.9108	116.9009	3.037	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
986.2315	76.9108	113.0733	3.087	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
1011.6800	76.9108	109.1957	3.137	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
1037.7285	76.9108	105.2681	3.187	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
1064.3770	76.9108	101.2905	3.237	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
1091.1255	76.9108	97.2629	3.287	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
1118.9740	76.9108	93.1853	3.337	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
1146.9225	76.9108	89.0577	3.387	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
1174.9710	76.9108	84.8801	3.437	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
1203.1195	76.9108	80.6525	3.487	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
1231.2680	76.9108	76.3749	3.537	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
1259.4165	76.9108	72.0473	3.587	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
1287.5650	76.9108	67.6697	3.637	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
1315.7135	76.9108	63.2421	3.687	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
1343.8620	76.9108	58.7645	3.737	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
1372.0105	76.9108	54.2369	3.787	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
1400.1590	76.9108	49.6593	3.837	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
1428.3075	76.9108	45.0317	3.887	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
1456.4560	76.9108	40.3541	3.937	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
1484.6045	76.9108	35.6265	3.987	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
1512.7530	76.9108	30.8489	4.037	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
1540.9015	76.9108	26.0213	4.087	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
1569.0500	76.9108	21.1437	4.137	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
1597.1985	76.9108	16.2161	4.187	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
1625.3470	76.9108	11.2385	4.237	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
1653.4955	76.9108	6.2609	4.287	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357
1681.6440	76.9108	1.2833	4.337	-0.9399	0.0003	-0.0427	0.8782	0.8162	0.3275	1.0357

406.4557	78.5394	251.8802	2.1188	-0.9216	0.0001	-0.3881	1.04054	1.05856	0.72928	0.95370
407.0287	78.6832	250.6866	2.3252	-0.8818	0.0000	-0.4716	0.99914	1.03421	0.78058	0.86850
407.7996	78.8359	249.3931	2.6063	-0.8376	-0.0001	-0.5462	0.92986	0.98501	0.80387	0.76864
408.8067	78.9984	247.9817	2.9297	-0.7924	0.0000	-0.6101	0.84171	0.91840	0.81214	0.65350
410.1154	79.1715	246.4411	3.3603	-0.7351	-0.0001	-0.6780	0.71181	0.82014	0.79073	0.50602
411.8181	79.3552	244.7492	3.9162	-0.6785	0.0000	-0.7346	0.58059	0.70626	0.75007	0.35198
414.0303	79.5498	242.8880	4.6300	-0.6141	-0.0002	-0.7892	0.40827	0.55820	0.67655	0.16834
416.9042	79.7554	240.8414	5.5579	-0.5516	-0.0001	-0.8341	0.22344	0.39269	0.58824	-0.02534
420.6365	79.9698	238.5980	6.7746	-0.4852	-0.0001	-0.8744	0.02004	0.20000	0.47361	-0.23526
425.4717	80.2052	236.1682	8.3233	-0.4194	-0.0002	-0.9078	-0.17743	-0.00655	0.35129	-0.44695
431.6824	80.4606	233.5856	10.2771	-0.3549	0.0001	-0.9349	-0.34831	-0.21288	0.22755	-0.64282
439.5497	80.7163	230.9318	12.7465	-0.2906	0.0002	-0.9569	-0.46712	-0.38990	0.00613	-0.78919
449.3046	80.9632	228.3355	15.8016	-0.2293	0.0000	-0.9734	-0.48265	-0.48072	-0.06430	-0.91933
461.0512	81.2182	225.9777	19.3213	-0.1689	0.0000	-0.9856	-0.40764	-0.43023	-0.06640	-0.95537
474.6799	81.5135	224.0772	22.8769	-0.1107	0.0000	-0.9939	-0.30901	-0.29813	-0.11831	-0.98333
489.8027	81.8655	222.8427	25.8631	-0.0541	0.0002	-1.0000	-0.23527	-0.18881	-0.24384	-0.98928
505.7554	82.2712	222.4388	27.6204	0.0023	0.0006	-0.9982	-0.22641	-0.19358	-0.35104	-0.94726
521.7064	82.7053	222.9294	27.8405	0.0593	-0.0026	-0.9938	-0.18946	-0.16923	-0.44302	-0.95417
535.0624	83.0630	224.0091	20.0492	0.1103	0.0003	-0.9843	0.94115	0.95188	0.45526	1.15994
545.3655	79.6736	256.8134	1.3121	-0.9990	0.0002	-0.9955	0.94675	0.96504	0.48017	1.10250
545.4238	79.7481	255.8071	1.3121	-0.9990	0.0002	-0.9955	0.94675	0.96504	0.48017	1.10250
545.5385	79.8272	254.9300	1.4080	-0.9870	0.0002	-0.1609	1.00172	0.01695	0.56127	1.11515
545.7368	79.9129	253.9305	1.5136	-0.9698	0.0002	-0.2441	1.01244	0.03568	0.62152	1.05881
546.0427	80.0049	252.9576	1.6380	-0.9461	0.0001	-0.3238	1.02771	0.05623	0.69900	1.02234
546.2692	80.1041	251.8487	1.7868	-0.9208	0.0001	-0.3900	1.00886	0.04849	0.74997	0.95399
546.5097	80.2111	250.6512	1.9589	-0.8805	-0.0001	-0.4741	0.97025	0.02357	0.80021	0.86697
546.7646	80.3265	249.3546	2.1933	-0.8365	-0.0001	-0.5479	0.90493	0.07435	0.82214	0.76633
547.0381	80.4513	247.9410	2.4628	-0.7908	-0.0001	-0.6120	0.81983	0.09716	0.82809	0.64972
547.3296	80.5869	246.3995	2.8214	-0.7337	-0.0002	-0.6795	0.70052	0.80949	0.80327	0.50233
547.6381	80.7341	244.7078	3.2838	-0.6771	-0.0001	-0.7359	0.56738	0.69651	0.75811	0.34840
547.9646	80.8945	242.8478	3.8774	-0.6128	-0.0003	-0.7902	0.39955	0.55026	0.67771	0.16567
548.3191	81.0698	240.8033	4.6478	-0.5504	-0.0002	-0.8349	0.21812	0.38660	0.57910	-0.02726
548.6933	81.2608	238.5629	5.6564	-0.4841	-0.0002	-0.8750	0.01743	0.19562	0.45018	-0.23652
549.0868	81.4786	236.1364	6.9384	-0.4186	-0.0002	-0.9082	-0.17834	-0.00968	0.30915	-0.44778
549.4997	81.7256	233.5580	8.5493	-0.3541	0.0001	-0.9352	-0.34732	-0.21421	0.16433	-0.62298
549.9322	81.9916	230.9083	10.5775	-0.2901	0.0002	-0.9570	-0.46443	-0.36853	0.02739	-0.76638
550.3857	82.2730	228.3158	13.0748	-0.2288	0.0000	-0.9735	-0.48043	-0.42963	-0.06808	-0.80675
550.8592	82.5829	225.9624	15.9341	-0.1685	0.0000	-0.9837	-0.40668	-0.42963	-0.12026	-0.59376
551.3523	82.9428	223.6066	18.7850	-0.1103	0.0000	-0.9939	-0.30880	-0.29645	-0.14749	-0.28963
551.8658	83.3598	221.2376	21.5938	-0.0537	0.0003	-0.9986	-0.25232	-0.20577	-0.18191	-0.19793
552.3993	83.8238	218.8371	24.4537	0.0031	0.0005	-1.0000	-0.23502	-0.18893	-0.24696	-0.18898
552.9528	84.3078	216.3971	27.3755	0.0598	0.0006	-0.9982	-0.22572	-0.19343	-0.35111	-0.19370
553.5263	84.8001	213.9896	30.3453	0.1103	-0.0026	-0.9939	-0.19226	-0.17102	-0.44884	-0.15685
554.1198	85.3123	211.6109	33.3755	0.1607	0.0003	-0.9875	-0.14269	-0.12469	-0.47351	-0.11538
554.7333	85.8448	209.1933	36.4678	0.2107	0.0002	-0.9790	-0.09606	-0.09392	-0.49550	-0.09786
555.3668	86.3981	206.7333	39.6218	0.2607	0.0002	-0.9678	-0.04659	-0.04659	-0.57926	-0.10990
556.0203	86.9725	204.2333	42.8355	0.3107	0.0001	-0.9548	0.00644	0.00644	-0.63931	-0.05354
556.6938	87.5679	201.6933	46.1093	0.3607	0.0000	-0.9407	0.02672	0.02672	-0.71709	-0.01630
557.3873	88.1843	199.1133	49.4437	0.4107	0.0000	-0.9257	0.09606	0.09606	-0.76792	0.04716
558.0908	88.8217	196.4933	52.8381	0.4607	-0.0001	-0.9107	0.22751	0.22751	-0.81729	0.25908
558.8043	89.4801	193.8333	56.2925	0.5107	-0.0002	-0.8957	0.34949	0.34949	-0.83814	0.57829
559.5278	90.1585	191.1333	59.8069	0.5607	-0.0001	-0.8808	0.46434	0.46434	-0.84211	0.64083
560.2613	90.8569	188.3933	63.3813	0.6107	-0.0003	-0.8658	0.57119	0.57119	-0.83390	0.74925
561.0048	91.5753	185.6133	66.9157	0.6607	-0.0001	-0.8508	0.67819	0.67819	-0.81390	0.84925
561.7583	92.3137	182.7933	70.4101	0.7107	-0.0003	-0.8358	0.77434	0.77434	-0.78685	0.94102
562.5218	93.0721	179.9333	73.8645	0.7607	-0.0002	-0.8208	0.86012	0.86012	-0.75211	1.03217
563.2953	93.8505	177.0333	77.2789	0.8107	-0.0001	-0.8058	0.93535	0.93535	-0.71741	1.11966
564.0788	94.6489	174.0933	80.7533	0.8607	0.0000	-0.7908	1.00000	1.00000	-0.68277	1.20317
564.8723	95.4673	171.1133	84.1877	0.9107	0.0000	-0.7758	1.05513	1.05513	-0.64902	1.28217
565.6758	96.3057	168.0933	87.5821	0.9607	0.0000	-0.7608	1.10966	1.10966	-0.61527	1.35717
566.4893	97.1641	165.0333	90.9365	1.0107	0.0000	-0.7458	1.16369	1.16369	-0.58152	1.42817
567.3028	98.0425	161.9333	94.2509	1.0607	0.0000	-0.7308	1.21672	1.21672	-0.54777	1.49517
568.1263	98.9409	158.7933	97.5253	1.1107	0.0000	-0.7158	1.26875	1.26875	-0.51402	1.55817
568.9598	99.8593	155.6133	100.7597	1.1607	0.0000	-0.7008	1.31978	1.31978	-0.48027	1.61717
569.8033	100.7977	152.3933	103.9541	1.2107	0.0000	-0.6858	1.36981	1.36981	-0.44652	1.67217
570.6568	101.7561	149.1333	107.1085	1.2607	0.0000	-0.6708	1.41884	1.41884	-0.41277	1.72317
571.5203	102.7345	145.8333	110.2329	1.3107	0.0000	-0.6558	1.46687	1.46687	-0.37902	1.77017
572.3938	103.7329	142.4933	113.3273	1.3607	0.0000	-0.6408	1.51390	1.51390	-0.34527	1.81317
573.2773	104.7513	139.1133	116.3917	1.4107	0.0000	-0.6258	1.55993	1.55993	-0.31152	1.85217
574.1708	105.7897	135.6933	119.4261	1.4607	0.0000	-0.6108	1.60496	1.60496	-0.27777	1.88717
575.0743	106.8481	132.2333	122.4305	1.5107	0.0000	-0.5958	1.64899	1.64899	-0.24402	1.91817
575.9878	107.9265	128.7333	125.4049	1.5607	0.0000	-0.5808	1.69192	1.69192	-0.21027	1.94517
576.9113	109.0249	125.1933	128.3493	1.6107	0.0000	-0.5658	1.73375	1.73375	-0.17652	1.96817
577.8448	110.1433	121.6133	131.2637	1.6607	0.0000	-0.5508	1.77448	1.77448	-0.14277	1.98717
578.7883	111.2817	118.0933	134.1481	1.7107	0.0000	-0.5358	1.81411	1.81411	-0.10902	1.99217
579.7418	112.4401	114.5333	137.0025	1.7607	0.0000	-0.5208	1.85264	1.85264	-0.07527	1.99317
580.7053	113.6185	110.9333	139.8269	1.8107	0.0000	-0.5058	1.89017	1.89017	-0.04152	1.99017
581.6788	114.8169	107.2933	142.6213	1.8607	0.0000	-0.4908	1.92670	1.92670	-0.00777	1.98317
582.6623	116.0353	103.6133	145.3857	1.9107	0.0000	-0.4758	1.96223	1.96223	0.02602	1.97217
583.6558	117.2737	99.8933	148.1201	1.9607	0.0000	-0.4608	1.99676	1.99676	0.05977	1.95717
584.6593	118.5321	96.1333	150.8245	2.0107	0.0000	-0.4458	2.03029	2.03029	0.09352	1.93817
585.6728	119.8105	92.3333	153.5089	2.0607	0.0000	-0.4308	2.06282	2.06282	0.12727	1.91517
586.6963	121.1089	88.4933	156.1733	2.1107	0.0000	-0.4158	2.09435	2.09435	0.16102	1.88817
587.7298	122.4273	84.6133	158.8177	2.1607	0.0000	-0.4008	2.12488	2.12488	0.19477	1.85717
588.7733	123.7657	80.6933	161.4421	2.2107	0.0000	-0.3858	2.15441	2.15441	0.22852	1.82217
589.8268	125.1241	76.7333	164.0465	2.2607	0.0000	-0.3708	2.18294	2.18294	0.26227	1.78317
590.8903	126.5025	72.7333	166.6309	2.3107	0.0000	-0.3558	2.21047	2.21047	0.29602	1.74017
591.9638	127.9009	68.6933	169.1953	2.3607	0.0000	-0.3408	2.23700	2.23700	0.32977	1.69317
593.0473	129.3193	64.6133	171.7397	2.4107	0.0000	-0.3258	2.26253	2.26253	0.36352	1.64317
594.1408	130.7577	60.4933	174.2641	2.4607	0.0000	-0.3108	2.28706	2.28706	0.39727	1.58917
595.2443	132.2161	56.3333	176.7685	2.5107	0.0000	-0.2958	2.31059			

431.9033	84.2672	233.5024	4.3425	-0.3526	0.0000	-0.9358	-0.35402	-0.22230	0.41800	-0.64469
439.7852	84.5426	230.8612	5.3322	-0.2891	0.0001	-0.9573	-0.46614	-0.39203	0.31698	-0.78338
449.5545	84.8790	228.2767	6.5311	-0.2279	-0.0001	-0.9737	-0.47950	-0.47906	0.20889	-0.79956
461.3170	85.2812	225.9322	7.8740	-0.1676	-0.0001	-0.9858	-0.40507	-0.42808	0.10150	-0.58769
474.9622	85.7480	224.0459	9.1723	-0.1096	-0.0001	-0.9940	-0.30703	-0.29480	0.00584	-0.28540
490.1018	86.2683	222.8277	10.1818	-0.0529	0.0002	-0.9986	-0.25077	-0.20459	-0.08472	-0.19587
506.0705	86.8192	222.4420	10.6623	0.0039	0.0004	-1.0000	-0.23358	-0.18813	-0.18706	-0.18752
522.0361	87.3718	222.9518	10.5329	0.0606	0.0005	-0.9982	-0.22520	-0.19229	-0.31280	-0.19211
534.6664	87.8086	223.9528	6.4714	0.1093	-0.0027	-0.9940	-0.19222	-0.17107	-0.43914	-0.15685

plate bottom upper

X	Y	Z	AREA	EX	EY	EZ	CP1	CP2	CP3	CP4
370.3788	79.9446	258.6369	26.2572	0.1564	-0.9877	0.0000	-0.30520	-0.15687	0.06282	-0.07510
378.2921	81.1979	258.4824	23.8983	0.1564	-0.9877	0.0000	-0.08385	0.18416	0.49717	-0.25270
386.1921	82.4532	258.3524	21.7328	0.1575	-0.9875	0.0031	-0.51112	0.58354	0.54744	-0.63609
392.6181	83.1738	258.2360	11.9621	0.0387	-0.9992	-0.0085	-0.67953	0.74315	0.7681	-0.83918
396.6186	83.3261	258.1220	7.8148	0.0349	-0.9994	-0.0001	-0.70982	0.7431	0.49206	-0.89116
399.5562	83.4285	258.0050	4.9728	0.0349	-0.9994	0.0000	-0.73665	0.80721	0.45772	-0.97937
401.6530	83.5017	257.9000	3.1265	0.0349	-0.9994	0.0000	-0.74486	0.81308	0.38099	-1.03469
403.1474	83.5518	257.8371	2.0772	0.0349	-0.9994	0.0000	-0.7496	0.82256	0.39160	-1.09544
404.2322	83.5918	257.8494	1.6496	0.0349	-0.9994	0.0000	-0.76222	0.78890	0.29166	-1.08625
404.7611	83.6103	258.2400	1.1051	0.0348	-0.9994	-0.0001	-0.76663	0.79886	0.38200	-1.14364
404.8882	83.6147	259.0109	1.0756	0.0349	-0.9994	0.0000	-0.72351	0.73032	0.19648	-1.03508
405.0267	83.6195	259.8840	1.2097	0.0349	-0.9994	0.0000	-0.68069	0.69162	0.17039	-1.02916
405.2771	83.6265	260.8597	1.4635	0.0350	-0.9994	0.0000	-0.58854	0.59822	0.01642	-0.92934
405.5302	83.6372	261.9288	1.7939	0.0349	-0.9994	0.0000	-0.49265	0.50961	-0.07882	-0.86271
405.9623	83.6522	263.0940	2.1898	0.0349	-0.9994	0.0000	-0.38046	0.40698	-0.17294	-0.76325
406.5604	83.6731	264.3529	2.6726	0.0349	-0.9994	0.0000	-0.24391	0.28079	-0.27855	-0.64715
407.3672	83.7013	265.7117	3.2742	0.0349	-0.9994	0.0000	-0.11783	0.16483	-0.34419	-0.53492
408.4217	83.7381	267.1867	3.9875	0.0349	-0.9994	0.0000	-0.01000	0.04813	-0.40515	-0.41512
409.7872	83.7858	268.7877	4.9205	0.0349	-0.9994	0.0000	-0.15499	-0.08644	-0.48371	-0.27213
411.5511	83.8474	270.5357	6.1239	0.0349	-0.9994	0.0000	-0.27875	-0.20304	-0.51892	-0.15592
413.8273	83.9269	272.4473	7.6964	0.0349	-0.9994	0.0000	-0.40358	-0.32567	-0.55206	-0.01204
416.7662	84.0295	274.5327	9.7459	0.0349	-0.9994	0.0000	-0.49883	-0.42931	-0.58477	-0.14646
420.5589	84.1619	276.8019	12.4027	0.0349	-0.9994	0.0000	-0.56748	-0.51397	-0.53956	-0.27087
425.4418	84.3324	279.2469	15.7571	0.0349	-0.9994	0.0000	-0.60281	-0.58381	-0.51447	-0.38077
431.6842	84.5505	281.8277	19.8312	0.0349	-0.9994	0.0000	-0.60653	-0.62880	-0.49565	-0.47295
439.5629	84.8256	284.4669	24.6382	0.0349	-0.9994	0.0000	-0.57523	-0.61647	-0.47049	-0.52837
449.3100	85.1659	287.0401	30.3387	0.0349	-0.9994	0.0000	-0.52815	-0.54303	-0.45360	-0.53034
461.0318	85.5753	289.3764	36.7690	0.0349	-0.9994	0.0000	-0.48476	-0.45111	-0.43752	-0.48541
474.6213	86.0738	291.5710	43.357	0.0349	-0.9994	0.0000	-0.46014	-0.40119	-0.43114	-0.43279
489.7010	86.5770	292.5130	45.1401	0.0350	-0.9994	0.0000	-0.44423	-0.38671	-0.42633	-0.40023
505.6117	87.1376	292.9528	45.2829	0.0348	-0.9994	-0.0001	-0.42345	-0.37279	-0.41578	-0.37637
521.4533	87.6852	292.5078	44.3098	0.0349	-0.9994	0.0000	-0.38967	-0.34117	-0.41301	-0.34132
533.7013	88.1129	291.4426	42.5567	0.0349	-0.9994	0.0000	-0.32350	-0.26965	-0.39683	-0.26187
570.2947	79.9313	261.8956	25.1921	0.1564	-0.9877	0.0000	-0.32978	-0.17428	-0.21007	-0.11134
378.0292	81.1563	261.4395	22.9102	0.1564	-0.9877	0.0000	-0.04988	-0.15644	-0.73738	-0.19113
385.6907	82.3822	261.1198	21.3040	0.1597	-0.9872	-0.0038	0.46263	0.54934	0.76460	-0.56707
391.8969	83.1230	260.8530	12.9990	0.0528	-0.9986	-0.0092	0.61339	0.68652	0.77055	-0.73244
395.9824	83.3070	260.5770	8.4458	0.0330	-0.9995	-0.0017	0.65524	0.74392	0.43060	-0.84373
398.7785	83.4014	260.2861	5.4105	0.0349	-0.9994	0.0000	0.68524	0.74677	0.33374	-0.94888
400.6836	83.4679	260.0328	3.4989	0.0349	-0.9994	0.0000	0.66478	0.75501	0.32955	-0.99227
401.9912	83.5136	259.8790	2.4546	0.0349	-0.9994	0.0000	0.64428	0.75501	0.32955	-0.99227
402.9528	83.5472	259.8802	1.2188	0.0349	-0.9994	0.0000	0.66882	0.72725	0.24542	-0.98138
403.5399	83.5676	260.3242	1.5002	0.0348	-0.9994	-0.0001	0.66707	0.71806	0.24964	-1.01013
404.8190	83.5774	260.3240	1.3369	0.0349	-0.9994	0.0000	0.59239	0.63849	0.12529	-0.92356
404.9098	83.5854	261.7829	1.3763	0.0348	-0.9994	0.0000	0.55236	0.60316	0.12713	-0.92078
404.9643	83.5945	262.8027	1.5389	0.0349	-0.9994	0.0000	0.46232	0.51649	0.02235	-0.82323
405.1554	83.6240	265.2319	1.7961	0.0349	-0.9994	0.0000	0.39181	0.45208	-0.01543	-0.78362
405.8233	83.6474	266.6146	2.1557	0.0349	-0.9994	0.0000	0.30254	0.36859	-0.08491	-0.69615
406.7079	83.6782	268.1023	2.6354	0.0349	-0.9994	0.0000	0.21261	0.28218	-0.13184	-0.61111
407.8524	83.7182	269.7047	3.2641	0.0349	-0.9994	0.0000	0.12557	0.19883	-0.17209	-0.51942
409.3173	83.7694	271.4278	4.0598	0.0349	-0.9994	0.0000	0.02787	0.10553	-0.22285	-0.41631
411.1846	83.8346	273.2846	5.1096	0.0350	-0.9994	0.0000	-0.07558	0.00428	-0.22285	-0.41631
413.5609	83.9176	275.2846	6.4680	0.0349	-0.9994	0.0000	-0.17381	0.09330	-0.37369	-0.40331
416.5827	84.0231	277.4302	8.2306	0.0349	-0.9994	0.0000	-0.27452	0.20248	-0.54990	-0.07216
420.4243	84.1573	279.7217	10.4761	0.0349	-0.9994	0.0000	-0.36633	0.26668	-0.76768	-0.04946
425.3031	84.3276	282.1450	12.2931	0.0349	-0.9994	0.0000	-0.45512	0.39605	-0.99265	-0.17060
431.4759	84.5432	284.6603	16.6977	0.0349	-0.9994	0.0000	-0.50615	0.53455	-0.99770	-0.28553
439.2249	84.8138	287.2011	20.5965	0.0349	-0.9994	0.0000	-0.50615	0.53455	-0.40087	-0.38572
448.8016	85.1482	289.6670	24.7512	0.0349	-0.9994	0.0000	-0.49564	0.53867	-0.39681	-0.45245
460.3268	85.5507	293.2806	28.7766	0.0349	-0.9994	0.0000	-0.46752	0.48322	-0.39441	-0.46847
473.6997	86.0177	295.0114	34.9959	0.0349	-0.9994	0.0000	-0.43757	0.40761	-0.38971	-0.43690
488.5546	86.5369	295.0114	36.8700	0.0349	-0.9994	0.0000	-0.41960	0.36436	-0.38963	-0.39394
503.7484	87.1376	295.5349	37.7665	0.0349	-0.9994	0.0000	-0.40801	0.35231	-0.38922	-0.36538
519.7484	87.6257	295.2125	35.9847	0.0349	-0.9994	0.0000	-0.39116	0.34222	-0.38345	-0.34530
531.5580	88.0381	294.1147	18.4052	0.0349	-0.9994	0.0000	-0.36183	0.31562	-0.38353	-0.31470
370.3755	79.9441	265.0971	23.8542	0.1564	-0.9877	0.0000	-0.31160	-0.26260	-0.37322	-0.25357
377.7758	81.1162	264.3755	22.0770	0.1564	-0.9877	0.0000	-0.35011	-0.18856	-0.35447	-0.13512
385.0231	82.2814	264.0130	21.1326	0.1612	-0.9869	0.0015	-0.01806	0.13024	-0.95721	-0.14383
391.0076	83.0506	263.7682	15.1103	0.0784	-0.9963	-0.0004	0.40655	0.50291	0.98201	-0.50763
395.0878	83.2865	263.4986	10.1869	0.0264	-0.9996	0.0023	0.52531	0.61225	0.68605	-0.69930
397.7849	83.3666	263.2031	6.8703	0.0349	-0.9994	0.0000	0.58946	0.68623	0.58273	-0.80527
399.5834	83.4295	262.9491	4.6889	0.0349	-0.9994	0.0000	0.57487	0.64693	0.46656	-0.84095
400.8225	83.4727	262.7912	3.4446	0.0349	-0.9994	0.0000	0.55581	0.65047	0.42823	-0.87075
401.7738	83.5060	262.7671	2.0279	0.0349	-0.9994	0.0000	0.53079	0.61762	0.17301	-0.87333
402.4557	83.5298	263.0490	1.1338	0.0349	-0.9994	0.0000	0.51065	0.59650	0.15828	-0.87869
402.8989	83.5452	263.5317	1.8571	0.0349	-0.9994	0.0000	0.45392	0.53902	0.08959	-0.82680
403.7854	83.5583	264.5317	1.8422	0.0349	-0.9994	0.0000	0.41700	0.50218	0.06697	-0.80182
404.2087	83.5733	265.6061	1.9881	0.0349	-0.9994	0.0000	0.34274	0.42975	-0.00229	-0.72163
404.8523	83.6135	266.8610	2.2584	0.0349	-0.9994	0.0000	0.28287	0.37140	-0.03753	-0.67508
405.6730	83.6421	268.2632	2.6581	0.0349	-0.9994	0.0000	0.19942	0.29138	-0.10337	-0.58918
406.7097	83.6783	271.4080	3.1986	0.0349	-0.9994	0.0000	0.11958	0.21285	-0.14136	-0.51213
408.0063	83.7236	273.1324	3.9034	0.0349	-0.9994	0.0000	0.03134	0.12720	-0.18591	-0.41947
409.6182	83.7799	274.9542	4.7923	0.0349	-0.9994	0.0000	-0.06231	0.03425	-0.22827	-0.32209
411.6174	83.8497	276.8752	5.9245	0.0349	-0.9994	0.0000	-0.15756	0.06362	-0.26838	-0.17882
414.0939	83.9362	278.8938	7.3408	0.0349	-0.9994	0.0000	-0.24717	0.15863	-0.30067	-0.00786
417.1615	84.0433	281.0040	9.0995	0.0349	-0.9994	0.0000	-0.33353	0.25388	-0.34796	-0.10076
420.9686	84.1763	283.1981	11.2486	0.0349	-0.9994	0.0000	-0.40587	0.33965	-0.36342	-0.20494
425.7111	84.3419	285.4614	13.8526	0.0349	-0.9994	0.0000	-0.45716	0.48258	-0.37077	-0.30086
431.6437	84.5491	287.7633	16.4651	0.0349	-0.9994	0.0000	-0.49868	0.52553	-0.37774	-0.38483
439.0784	84.8087	290.0935	20.2260	0.0349	-0.9994	0.0000	-0.48596	0.52451	-0.37777	-0.44208
448.3116	85.1311	292.2834	24.7569							

384.4502	82.1902	267.1095	20.9296	0.1615	-0.9869	0.0001	0.34454	0.45324	1.18789	0.44045
390.1426	82.9794	267.0819	17.4981	0.1055	-0.9944	0.0047	0.43011	0.53498	0.98560	0.61964
394.2237	83.2701	267.0464	12.3871	0.0176	-0.9998	-0.0004	0.51219	0.60206	0.65806	0.75740
396.9063	83.3360	266.9582	8.9097	0.0349	-0.9994	0.0000	0.45924	0.54099	0.27114	0.74803
398.7204	83.3993	266.8633	6.5005	0.0349	-0.9994	0.0000	0.45312	0.53759	0.15886	0.76463
400.0063	83.4442	266.7997	4.9802	0.0349	-0.9994	0.0000	0.42695	0.51697	0.11622	0.74978
401.0117	83.4793	266.7921	4.2733	0.0348	-0.9994	0.0000	0.39576	0.48910	0.09897	0.72939
401.7784	83.5061	267.0050	2.9754	0.0350	-0.9994	0.0000	0.36768	0.46382	0.07933	0.71828
402.3564	83.5263	267.5515	2.6455	0.0349	-0.9994	0.0000	0.32444	0.42216	0.03745	0.68295
402.9028	83.5454	268.3893	2.6151	0.0349	-0.9994	0.0000	0.28194	0.38027	0.00332	0.64597
403.4895	83.5659	269.4961	2.7820	0.0349	-0.9994	0.0000	0.22014	0.32028	-0.03759	0.58297
404.1716	83.5897	270.8233	3.1037	0.0349	-0.9994	0.0000	0.16205	0.26273	-0.06629	0.52848
404.9925	83.6184	272.3172	3.5733	0.0349	-0.9994	0.0000	0.08966	0.19220	-0.10821	0.45518
405.9889	83.6532	273.9304	4.1891	0.0349	-0.9994	0.0000	0.02775	0.12486	-0.13197	0.38820
407.1961	83.6953	275.6313	4.9606	0.0349	-0.9994	0.0000	-0.04842	0.05348	-0.15998	0.30960
408.6528	83.7462	277.4025	5.9322	0.0349	-0.9994	0.0000	-0.11654	-0.01815	-0.18019	0.23267
410.4046	83.8074	279.2311	7.0110	0.0349	-0.9994	0.0000	-0.18045	-0.08773	-0.20250	0.15522
412.5083	83.8808	281.1095	8.3359	0.0349	-0.9994	0.0000	-0.23905	-0.15478	-0.22418	0.07629
415.0343	83.9690	283.0300	9.8982	0.0349	-0.9994	0.0000	-0.29222	-0.22108	-0.24680	-0.00596
418.0747	84.0752	284.9847	11.7448	0.0349	-0.9994	0.0000	-0.33678	-0.28571	-0.26479	-0.08763
421.7583	84.2038	286.9684	13.9653	0.0349	-0.9994	0.0000	-0.37638	-0.34944	-0.28455	-0.16996
426.2718	84.3614	288.9741	16.6519	0.0349	-0.9994	0.0000	-0.40884	-0.41000	-0.30122	-0.25335
431.8821	84.5574	290.9839	19.8530	0.0349	-0.9994	0.0000	-0.42933	-0.45598	-0.31853	-0.33285
438.9382	84.8038	292.9725	23.4156	0.0349	-0.9994	0.0000	-0.43077	-0.46543	-0.33064	-0.39304
447.7798	85.1125	294.9018	26.7970	0.0349	-0.9994	0.0000	-0.41823	-0.42895	-0.34222	-0.41635
458.5676	85.4893	296.6882	29.3530	0.0349	-0.9994	0.0000	-0.40069	-0.37236	-0.34962	-0.39798
471.1855	85.9299	298.1993	30.8378	0.0349	-0.9994	0.0000	-0.38913	-0.36642	-0.35722	-0.36561
485.2446	86.4211	299.2945	31.4418	0.0349	-0.9994	0.0000	-0.38208	-0.36220	-0.36230	-0.34170
500.0850	86.9394	299.8801	31.4084	0.0349	-0.9994	0.0000	-0.37054	-0.32065	-0.36064	-0.32582
514.6524	87.4479	299.8415	29.6958	0.0349	-0.9994	0.0000	-0.34804	-0.30182	-0.36234	-0.30216
526.3234	87.9554	299.0333	18.6625	0.0349	-0.9994	0.0000	-0.31039	-0.26803	-0.35330	-0.25837
537.1645	88.4641	297.0116	12.3113	0.0349	-0.9994	0.0000	-0.26931	-0.21706	-0.33918	-0.17270
548.0562	88.9724	272.0116	6.8556	0.0349	-0.9877	0.0000	-0.02671	0.09429	1.25925	0.08584
559.1408	89.4808	270.0116	2.3113	0.0349	-0.9869	-0.0005	0.27927	0.40066	1.32281	0.38684
570.2234	89.9893	271.9044	2.3113	0.0349	-0.9923	0.0020	0.33142	0.45665	1.07834	0.54589
581.3062	90.4978	271.5320	16.7775	0.0144	-0.9999	-0.0016	0.41023	0.52026	0.68584	0.69540
592.3890	91.0063	271.1649	12.1987	0.0349	-0.9994	0.0000	0.32745	0.42388	0.18449	0.64412
603.4718	91.5148	271.8044	9.0027	0.0349	-0.9994	0.0000	0.32081	0.41643	0.07091	0.64335
614.5546	92.0233	271.9801	6.8598	0.0349	-0.9994	0.0000	0.28350	0.38063	0.02544	0.59933
625.6374	92.5318	272.0156	5.6081	0.0348	-0.9994	0.0000	0.25666	0.35410	0.03324	0.56991
636.7202	93.0403	272.1772	3.9389	0.0350	-0.9994	0.0000	0.22805	0.32727	0.01915	0.54982
647.8030	93.5488	272.6461	3.6974	0.0348	-0.9994	0.0000	0.19651	0.29642	-0.00298	0.52490
658.8858	94.0573	273.4401	3.7133	0.0349	-0.9994	0.0000	0.15585	0.25704	-0.03415	0.48989
669.9686	94.5658	274.5270	3.9208	0.0349	-0.9994	0.0000	0.10831	0.21024	-0.05679	0.44206
681.0514	95.0743	275.8466	4.2810	0.0349	-0.9994	0.0000	0.05906	0.16086	-0.07755	0.39271
692.1342	95.5828	277.3301	4.7779	0.0349	-0.9994	0.0000	0.00525	0.10648	-0.09950	0.33654
703.2170	96.0913	278.9168	5.3955	0.0349	-0.9994	0.0000	-0.04499	0.05377	-0.11605	0.28124
714.3008	96.6000	280.5644	6.1309	0.0349	-0.9994	0.0000	-0.09716	-0.00122	-0.13601	0.21935
725.3836	97.1085	282.2471	6.9737	0.0349	-0.9994	0.0000	-0.14630	-0.05585	-0.15183	0.15918
736.4664	97.6170	283.9484	7.9385	0.0349	-0.9994	0.0000	-0.19442	-0.11078	-0.17087	0.09738
747.5492	98.1255	285.6858	9.0413	0.0349	-0.9994	0.0000	-0.24124	-0.16725	-0.19058	0.03310
758.6320	98.6340	287.3731	10.3203	0.0349	-0.9994	0.0000	-0.28765	-0.22780	-0.21381	0.03519
769.7148	99.1425	289.0888	11.8512	0.0349	-0.9994	0.0000	-0.33765	-0.28002	-0.23981	0.03632
780.7976	99.6510	290.8071	13.7600	0.0349	-0.9994	0.0000	-0.39116	-0.33116	-0.25709	0.03745
791.8804	100.1595	292.5277	15.7156	0.0349	-0.9994	0.0000	-0.44424	-0.38553	-0.27402	0.03858
802.9632	100.6680	294.2484	17.6844	0.0349	-0.9994	0.0000	-0.49732	-0.43853	-0.29036	0.03971
814.0460	101.1765	295.9691	19.6532	0.0349	-0.9994	0.0000	-0.55040	-0.49161	-0.30725	0.04084
825.1288	101.6850	297.6908	21.6220	0.0349	-0.9994	0.0000	-0.60348	-0.54470	-0.32414	0.04197
836.2116	102.1935	299.4125	23.5908	0.0349	-0.9994	0.0000	-0.65656	-0.59779	-0.34103	0.04310
847.2944	102.7020	301.1342	25.5600	0.0349	-0.9994	0.0000	-0.70964	-0.65088	-0.35792	0.04423
858.3772	103.2105	302.8559	27.5292	0.0349	-0.9994	0.0000	-0.76272	-0.70396	-0.37481	0.04536
869.4600	103.7190	304.5776	29.4984	0.0349	-0.9994	0.0000	-0.81580	-0.75704	-0.39170	0.04649
880.5428	104.2275	306.2993	31.4676	0.0349	-0.9994	0.0000	-0.86888	-0.81012	-0.40859	0.04762
891.6256	104.7360	308.0210	33.4368	0.0349	-0.9994	0.0000	-0.92196	-0.86320	-0.42548	0.04875
902.7084	105.2445	309.7427	35.4060	0.0349	-0.9994	0.0000	-0.97504	-0.91632	-0.44237	0.04988
913.7912	105.7530	311.4644	37.3752	0.0349	-0.9994	0.0000	-1.02812	-0.96940	-0.45926	0.05101
924.8740	106.2615	313.1861	39.3444	0.0349	-0.9994	0.0000	-1.08120	-1.02248	-0.47615	0.05214
935.9568	106.7700	314.9078	41.3136	0.0349	-0.9994	0.0000	-1.13428	-1.07556	-0.49304	0.05327
947.0396	107.2785	316.6295	43.2828	0.0349	-0.9994	0.0000	-1.18736	-1.12864	-0.51003	0.05440
958.1224	107.7870	318.3512	45.2520	0.0349	-0.9994	0.0000	-1.24044	-1.18172	-0.52702	0.05553
969.2052	108.2955	320.0729	47.2212	0.0349	-0.9994	0.0000	-1.29352	-1.23480	-0.54401	0.05666
980.2880	108.8040	321.7946	49.1904	0.0349	-0.9994	0.0000	-1.34660	-1.28788	-0.56100	0.05779
991.3708	109.3125	323.5163	51.1596	0.0349	-0.9994	0.0000	-1.39968	-1.34096	-0.57809	0.05892
1002.4536	109.8210	325.2380	53.1288	0.0349	-0.9994	0.0000	-1.45276	-1.39404	-0.59518	0.06005
1013.5364	110.3295	326.9597	55.0980	0.0349	-0.9994	0.0000	-1.50584	-1.44712	-0.61226	0.06118
1024.6192	110.8380	328.6814	57.0672	0.0349	-0.9994	0.0000	-1.55892	-1.50020	-0.62934	0.06231
1035.7020	111.3465	330.4031	59.0364	0.0349	-0.9994	0.0000	-1.61200	-1.55328	-0.64642	0.06344
1046.7848	111.8550	332.1248	61.0056	0.0349	-0.9994	0.0000	-1.66508	-1.60636	-0.66350	0.06457
1057.8676	112.3635	333.8465	62.9748	0.0349	-0.9994	0.0000	-1.71816	-1.65944	-0.68058	0.06570
1068.9504	112.8720	335.5682	64.9440	0.0349	-0.9994	0.0000	-1.77124	-1.71252	-0.69766	0.06683
1080.0332	113.3805	337.2899	66.9132	0.0349	-0.9994	0.0000	-1.82432	-1.76560	-0.71474	0.06796
1091.1160	113.8890	339.0116	68.8824	0.0349	-0.9994	0.0000	-1.87740	-1.81868	-0.73182	0.06909
1102.1988	114.3975	340.7333	70.8516	0.0349	-0.9994	0.0000	-1.93048	-1.87176	-0.74890	0.07022
1113.2816	114.9060	342.4550	72.8208	0.0349	-0.9994	0.0000	-1.98356	-1.92484	-0.76598	0.07135
1124.3644	115.4145	344.1767	74.7900	0.0349	-0.9994	0.0000	-2.03664	-1.97792	-0.78306	0.07248
1135.4472	115.9230	345.8984	76.7592	0.0349	-0.9994	0.0000	-2.08972	-2.03100	-0.79994	0.07361
1146.5300	116.4315	347.6201	78.7284	0.0349	-0.9994	0.0000	-2.14280	-2.08408	-0.81682	0.07474
1157.6128	116.9400	349.3418	80.6976	0.0349	-0.9994	0.0000	-2.19588	-2.13716	-0.83370	0.07587
1168.6956	117.4485	351.0635	82.6668	0.0349	-0.9994	0.0000	-2.24896	-2.19024	-0.85058	0.07700
1179.7784	117.9570	352.7852	84.6360	0.0349	-0.9994	0.0000	-2.30204	-2.24332	-0.86746	0.07813
1190.8612	118.4655	354.5069	86.6052	0.0349	-0.9994	0.0000				



401.9304	83.5114	284.8720	4.7747	0.0349	-0.9994	0.0000	0.00312	0.12193	-0.01163	0.29404
402.7007	83.5383	285.1927	5.0881	0.0348	-0.9994	0.0000	-0.00804	0.10715	-0.01932	0.28283
403.5421	83.5677	285.7928	5.3484	0.0350	-0.9994	0.0000	-0.03205	0.08177	-0.04207	0.26057
404.4627	83.5999	286.6255	5.6154	0.0349	-0.9994	0.0000	-0.05515	0.05571	-0.05467	0.23422
405.4763	83.6353	287.6243	5.9144	0.0349	-0.9994	0.0000	-0.08218	0.02657	-0.06924	0.20458
406.5985	83.6744	288.7270	6.2602	0.0349	-0.9994	0.0000	-0.10937	0.00399	-0.07815	0.17308
407.8457	83.7180	289.8857	6.6590	0.0349	-0.9994	0.0000	-0.13710	0.03583	-0.08787	0.13883
409.2372	83.7666	291.0703	7.1281	0.0349	-0.9994	0.0000	-0.16506	0.06918	-0.09893	0.10204
410.7959	83.8210	292.2653	7.6737	0.0349	-0.9994	0.0000	-0.19261	0.10368	-0.11195	0.06464
412.5518	83.8823	293.4653	8.3360	0.0349	-0.9994	0.0000	-0.21999	0.13872	-0.12483	0.02642
414.5465	83.9520	294.6720	9.1554	0.0349	-0.9994	0.0000	-0.24822	0.17679	-0.13630	-0.01320
416.8376	84.0320	295.8888	10.1905	0.0349	-0.9994	0.0000	-0.27115	0.21458	-0.15012	-0.05581
419.5102	84.1253	297.1174	11.5407	0.0349	-0.9994	0.0000	-0.29399	0.25217	-0.16615	-0.10124
422.6958	84.2366	298.3541	13.3338	0.0349	-0.9994	0.0000	-0.31500	0.28969	-0.18498	-0.14996
426.5873	84.3723	299.5831	15.6573	0.0349	-0.9994	0.0000	-0.33372	0.32631	-0.20330	-0.20220
431.4663	84.5429	300.7613	18.5741	0.0349	-0.9994	0.0000	-0.34746	0.35637	-0.22255	-0.25608
437.7104	84.7609	301.8649	21.9982	0.0349	-0.9994	0.0000	-0.35170	0.36743	-0.24050	-0.30267
445.6725	85.0390	302.9149	25.3263	0.0349	-0.9994	0.0000	-0.34822	0.35010	-0.25976	-0.32917
455.5007	85.3822	303.9025	27.8128	0.0349	-0.9994	0.0000	-0.34197	0.31601	-0.27830	-0.32679
467.0554	85.7857	304.7697	29.0953	0.0349	-0.9994	0.0000	-0.33902	0.29130	-0.29643	-0.31077
479.9289	86.2354	305.4485	29.2710	0.0349	-0.9994	0.0000	-0.33938	0.28507	-0.31139	-0.29785
493.4896	86.7090	305.9074	28.5897	0.0349	-0.9994	0.0000	-0.33714	0.28615	-0.31824	-0.29039
506.8554	87.1756	306.1461	27.1555	0.0349	-0.9994	0.0000	-0.32494	0.27582	-0.32274	-0.27552
518.4446	87.5802	306.0227	22.3965	0.0349	-0.9994	0.0000	-0.29735	0.26144	-0.33014	-0.25669
537.6157	88.0908	284.4999	20.1327	0.1564	-0.9877	0.0000	-0.38500	0.21221	-0.07806	-0.09689
581.8855	81.7671	283.6749	18.8661	0.1564	-0.9877	0.0000	-0.00825	0.11559	0.44178	0.19978
586.2026	82.4666	284.2249	16.5799	0.1644	-0.9864	-0.0019	0.09834	0.25881	0.42603	0.35567
590.6537	83.0143	285.8334	21.2190	0.0859	-0.9963	-0.0013	0.08750	0.25869	0.46114	0.41474
594.6153	83.2670	287.7813	15.1211	0.0287	-0.9966	-0.0016	0.05638	0.22280	0.23687	0.40732
597.2058	83.3465	289.2299	11.1228	0.0349	-0.9994	0.0000	-0.01843	0.13098	-0.00418	0.31740
598.9975	83.4090	290.1853	8.3587	0.0349	-0.9994	0.0000	-0.02275	0.12211	-0.02163	0.25155
600.3027	83.4545	290.7427	6.4984	0.0349	-0.9994	0.0000	-0.05401	0.08673	-0.03258	0.23432
601.3155	83.4899	290.9936	5.3672	0.0349	-0.9994	0.0000	-0.05898	0.07873	-0.06693	0.22204
602.1348	83.5185	291.1198	4.3437	0.0349	-0.9994	0.0000	-0.07256	0.07831	-0.05111	0.21458
602.9127	83.5457	291.3783	4.7989	0.0349	-0.9994	0.0000	-0.07831	0.09567	-0.03128	0.19742
603.7732	83.5758	291.8648	1.1868	0.0349	-0.9994	0.0000	-0.11060	0.01327	-0.04357	0.17691
604.7083	83.6084	292.5319	0.3895	0.0349	-0.9994	0.0000	-0.12858	0.00828	-0.05765	0.15425
605.7211	83.6438	293.3217	0.6153	0.0349	-0.9994	0.0000	-0.14629	0.03124	-0.06614	0.13015
606.8219	83.6822	294.1861	0.9686	0.0349	-0.9994	0.0000	-0.16468	0.05571	-0.07502	0.10342
608.0252	83.7243	294.0826	6.3277	0.0349	-0.9994	0.0000	-0.18329	0.08184	-0.08619	0.07369
609.3517	83.7706	296.0238	6.7731	0.0349	-0.9994	0.0000	-0.20210	0.10958	-0.10066	0.04249
610.8859	83.8221	296.9741	7.3147	0.0349	-0.9994	0.0000	-0.22135	0.13942	-0.11486	0.01000
612.4572	83.8800	297.9448	8.0054	0.0349	-0.9994	0.0000	-0.24080	0.17127	-0.12732	-0.02473
614.0733	83.9460	298.9415	8.8838	0.0349	-0.9994	0.0000	-0.26085	0.20585	-0.14124	-0.06417
616.5534	84.0221	299.9674	10.0030	0.0349	-0.9994	0.0000	-0.28120	0.24304	-0.15809	-0.10920
619.1158	84.1116	301.0193	11.4636	0.0349	-0.9994	0.0000	-0.30175	0.28270	-0.17889	-0.16031
622.1986	84.2193	302.0834	13.3968	0.0349	-0.9994	0.0000	-0.32076	0.31993	-0.20047	-0.21466
625.9966	84.3519	303.1293	15.8371	0.0349	-0.9994	0.0000	-0.33664	0.34878	-0.22439	-0.26835
630.7882	84.5192	304.0891	18.8245	0.0349	-0.9994	0.0000	-0.34449	0.35868	-0.24694	-0.31285
636.9399	84.7340	304.9331	22.2757	0.0349	-0.9994	0.0000	-0.34373	0.34225	-0.26787	-0.36058
644.7720	85.0075	305.7108	25.5767	0.0349	-0.9994	0.0000	-0.33872	0.30988	-0.28489	-0.39058
654.4028	85.3439	306.4413	28.0696	0.0349	-0.9994	0.0000	-0.33528	0.28764	-0.29540	-0.31273
665.6927	85.7381	307.0891	29.4008	0.0349	-0.9994	0.0000	-0.33036	0.27510	-0.31116	-0.29698
678.2496	86.1767	307.6078	29.5940	0.0349	-0.9994	0.0000	-0.32086	0.27531	-0.31531	-0.28662
691.4718	86.6385	307.9769	28.2333	0.0349	-0.9994	0.0000	-0.31799	0.26556	-0.31826	-0.27155
704.5568	87.0953	308.2249	23.2569	0.0349	-0.9994	0.0000	-0.29364	0.25515	-0.32626	-0.25874
718.0041	87.4950	308.3133	17.7088	0.1564	-0.9877	0.0000	-0.31809	0.14537	-0.01872	-0.01910
732.0108	87.5018	308.7360	15.5885	0.1570	-0.9876	0.0003	-0.02976	0.15964	0.27714	0.25657
746.8931	87.6996	288.5774	13.2766	0.1642	-0.9864	-0.0048	0.06389	0.24024	0.24512	0.36000
762.6894	88.1227	290.5990	18.2422	0.0485	-0.9988	-0.0109	0.07172	0.24870	0.36050	0.40637
779.5178	88.5827	292.9324	12.6102	0.0339	-0.9994	-0.0007	-0.00198	0.16109	0.12024	0.31702
797.6504	89.0620	294.5705	9.1066	0.0349	-0.9994	0.0000	-0.04919	0.09581	0.01394	0.25241
816.2735	89.5505	296.6305	6.8032	0.0349	-0.9994	0.0000	-0.05937	0.08130	0.01377	0.23517
835.7471	90.0406	298.2584	5.3224	0.0349	-0.9994	0.0000	-0.08346	0.05258	-0.02537	0.20050
855.3755	90.5321	299.5621	4.4802	0.0349	-0.9994	0.0000	-0.09066	0.04049	-0.01017	0.18192
875.2126	91.0252	296.7092	3.7081	0.0350	-0.9994	0.0000	-0.10244	0.02797	-0.01409	0.17193
895.0626	91.5175	296.9388	4.1510	0.0349	-0.9994	0.0000	-0.10699	0.02010	-0.01793	0.16616
914.9789	92.0104	297.3441	4.4692	0.0348	-0.9994	0.0000	-0.11863	0.00548	-0.03104	0.15532
934.9678	92.5030	297.8807	4.7412	0.0349	-0.9994	0.0000	-0.12789	0.00898	-0.03054	0.14353
954.9613	93.0000	298.5030	5.0170	0.0349	-0.9994	0.0000	-0.13894	0.02457	-0.05122	0.11830
974.9556	93.5000	299.1788	5.3477	0.0349	-0.9994	0.0000	-0.14992	0.04108	-0.05693	0.10126
994.9500	94.0000	299.8895	5.6283	0.0349	-0.9994	0.0000	-0.16151	0.05815	-0.06121	0.08295
1014.9444	94.5000	300.6292	5.8191	0.0349	-0.9994	0.0000	-0.17350	0.07617	-0.06765	0.06222
1034.9388	95.0000	301.3996	6.0134	0.0349	-0.9994	0.0000	-0.18595	0.09522	-0.07799	0.04017
1054.9332	95.5000	302.2070	6.2134	0.0349	-0.9994	0.0000	-0.19879	0.11540	-0.08732	0.01813
1074.9276	96.0000	303.0593	6.4264	0.0349	-0.9994	0.0000	-0.21193	0.13692	-0.09327	-0.00469
1094.9220	96.5000	303.9574	6.6530	0.0349	-0.9994	0.0000	-0.22549	0.16049	-0.09893	-0.03060
1114.9164	97.0000	304.8921	6.8841	0.0349	-0.9994	0.0000	-0.23896	0.18613	-0.10745	-0.06152
1134.9108	97.5000	305.8380	7.1289	0.0349	-0.9994	0.0000	-0.25261	0.21509	-0.12110	-0.09869
1154.9052	98.0000	306.7833	7.3941	0.0349	-0.9994	0.0000	-0.26634	0.24657	-0.13796	-0.14268
1174.9000	98.5000	307.7201	7.6425	0.0349	-0.9994	0.0000	-0.28031	0.27809	-0.15905	-0.19321
1194.8944	99.0000	308.6299	7.8936	0.0349	-0.9994	0.0000	-0.29003	0.29778	-0.18078	-0.24105
1214.8888	99.5000	309.5430	8.1440	0.0349	-0.9994	0.0000	-0.29495	0.29383	-0.20442	-0.27189
1234.8832	100.0000	309.1110	8.3963	0.0349	-0.9994	0.0000	-0.29674	0.27372	-0.22868	-0.27777
1254.8776	100.5000	308.6299	8.6486	0.0349	-0.9994	0.0000	-0.29914	0.25703	-0.25216	-0.27102
1274.8720	101.0000	308.1461	8.9009	0.0349	-0.9994	0.0000	-0.30413	0.23537	-0.27290	-0.26484
1294.8664	101.5000	307.6613	9.1532	0.0349	-0.9994	0.0000	-0.30810	0.20848	-0.28641	-0.25350
1314.8608	102.0000	307.1788	9.4055	0.0349	-0.9994	0.0000	-0.30378	0.18151	-0.30022	-0.23521
1334.8552	102.5000	306.6953	9.6578	0.0349	-0.9994	0.0000	-0.27771	0.15173	-0.31587	-0.21552
1354.8496	103.0000	306.2128	9.9101	0.0349	-0.9994	0.0000	-0.21173	0.11540	-0.33299	-0.19587
1374.8440	103.5000	305.7303	10.1624	0.0349	-0.9994	0.0000	-0.08045	0.08545	-0.10937	-0.17164

408.0050	83.7236	304.9075	5.6927	0.0349	-0.9994	0.0000	-0.15447	-0.09865	-0.10860	0.01819
409.2743	83.7679	305.5648	6.3924	0.0349	-0.9994	0.0000	-0.16698	-0.11687	-0.12418	-0.00306
410.7380	83.8190	306.2753	7.3136	0.0349	-0.9994	0.0000	-0.18074	-0.13698	-0.14036	-0.02577
412.4542	83.8789	307.0487	8.4884	0.0349	-0.9994	0.0000	-0.19552	-0.15916	-0.15289	-0.05018
414.4936	83.9502	307.8840	9.9489	0.0349	-0.9994	0.0000	-0.21174	-0.18460	-0.16393	-0.07878
416.9590	84.0363	308.7653	11.8421	0.0349	-0.9994	0.0000	-0.22824	-0.21261	-0.17599	-0.11251
420.0141	84.1429	309.6542	14.3502	0.0349	-0.9994	0.0000	-0.24659	-0.24431	-0.19301	-0.15343
423.8593	84.2772	310.4856	17.3487	0.0349	-0.9994	0.0000	-0.26327	-0.27373	-0.20920	-0.19730
428.7528	84.4481	311.1080	20.7631	0.0349	-0.9994	0.0000	-0.28257	-0.29884	-0.22808	-0.24278
435.0060	84.6665	311.4751	24.5586	0.0349	-0.9994	0.0000	-0.29447	-0.30819	-0.24232	-0.27988
442.8264	84.9395	311.7399	28.1045	0.0349	-0.9994	0.0000	-0.29829	-0.29604	-0.25406	-0.29677
452.2562	85.2683	311.9893	31.0166	0.0349	-0.9994	0.0000	-0.29866	-0.27173	-0.26553	-0.29334
463.1743	85.6501	312.2179	33.2921	0.0349	-0.9994	0.0000	-0.29887	-0.25176	-0.27573	-0.28040
475.2502	86.0719	312.4177	35.2902	0.0349	-0.9994	0.0000	-0.30007	-0.24338	-0.28436	-0.26797
487.9561	86.5156	312.5852	37.3708	0.0349	-0.9994	0.0000	-0.29956	-0.24332	-0.28854	-0.25975
500.6508	86.9589	312.7026	39.9959	0.0349	-0.9994	0.0000	-0.29120	-0.23744	-0.29630	-0.24934
511.5132	87.3382	313.0117	43.4665	0.0349	-0.9994	0.0000	-0.27736	-0.23930	-0.30692	-0.25340
385.9655	82.4135	296.1500	8.4680	0.1564	-0.9877	0.0000	-0.22796	0.01383	0.13410	0.13801
387.9320	82.7324	296.6582	10.0197	0.1661	-0.9861	-0.0050	0.08601	0.22259	0.21298	0.31653
389.8223	83.0154	297.8507	9.2521	0.1278	-0.9918	0.0024	0.01665	0.22966	0.30060	0.37754
392.2881	83.1798	299.8198	16.9568	0.0337	-0.9994	-0.0025	0.10211	0.26934	0.38355	0.41404
394.9988	83.2694	301.9815	11.2560	0.0349	-0.9994	0.0000	-0.02464	0.13835	0.19839	0.28002
396.9332	83.3369	303.4428	7.8190	0.0349	-0.9994	0.0000	-0.02571	0.11209	0.22764	0.25565
398.3651	83.3869	304.4456	5.6307	0.0349	-0.9994	0.0000	-0.04452	0.09092	0.18875	0.23218
399.4440	83.4246	305.1297	4.2101	0.0349	-0.9994	0.0000	-0.06007	0.07009	0.18642	0.20711
400.2782	83.4537	305.5811	3.3042	0.0349	-0.9994	0.0000	-0.07022	0.05538	0.17809	0.18828
400.9356	83.4767	305.8898	2.6826	0.0349	-0.9994	0.0000	-0.07896	0.04667	0.17708	0.17875
401.5358	83.4976	306.1864	3.0095	0.0349	-0.9994	0.0000	-0.08403	0.04007	0.17370	0.17378
402.1797	83.5201	306.5380	3.2989	0.0349	-0.9994	0.0000	-0.09046	0.03207	0.16892	0.16617
402.8749	83.5444	306.9325	3.5910	0.0349	-0.9994	0.0000	-0.09563	0.02420	0.16257	0.15717
403.6340	83.5709	307.3633	3.9153	0.0350	-0.9994	0.0000	-0.10062	0.01619	0.15440	0.14813
404.4729	83.6002	307.8295	4.3041	0.0349	-0.9994	0.0000	-0.10510	0.00804	0.14707	0.13987
405.4109	83.6330	308.3337	4.7703	0.0349	-0.9994	0.0000	-0.10949	-0.00090	0.13927	0.13057
406.4773	83.6702	308.8841	5.4023	0.0349	-0.9994	0.0000	-0.11396	-0.01090	0.12829	0.11888
407.7077	83.7132	309.4906	6.1696	0.0349	-0.9994	0.0000	-0.11848	-0.02216	0.11267	0.10433
409.1489	83.7635	310.1649	7.1978	0.0349	-0.9994	0.0000	-0.12369	-0.03537	0.09500	0.08757
410.8666	83.8235	310.9203	8.5164	0.0349	-0.9994	0.0000	-0.12938	-0.05116	0.07823	0.06795
412.9391	83.8958	311.7547	10.1446	0.0349	-0.9994	0.0000	-0.13675	-0.07160	0.05927	0.04258
415.4802	83.9846	312.6460	12.2762	0.0349	-0.9994	0.0000	-0.14408	-0.09660	0.03647	0.00996
418.6697	84.0960	313.5405	15.1145	0.0349	-0.9994	0.0000	-0.15403	-0.13057	0.00286	-0.03496
422.7081	84.2370	314.3561	18.5183	0.0349	-0.9994	0.0000	-0.16276	-0.17017	-0.03359	-0.08864
427.8113	84.4152	314.8884	22.3591	0.0349	-0.9994	0.0000	-0.17536	-0.21228	-0.07962	-0.15401
434.2185	84.6390	315.0812	26.7434	0.0349	-0.9994	0.0000	-0.18815	-0.23227	-0.11447	-0.20587
442.0945	84.9140	315.1545	31.1679	0.0349	-0.9994	0.0000	-0.20045	-0.23911	-0.14353	-0.22618
451.4866	85.2420	315.2244	35.2051	0.0349	-0.9994	0.0000	-0.21328	-0.21872	-0.17491	-0.22823
462.2968	85.6195	315.2503	38.2765	0.0349	-0.9994	0.0000	-0.22622	-0.21195	-0.20500	-0.22548
474.2256	86.0360	315.3488	39.8755	0.0349	-0.9994	0.0000	-0.24174	-0.21465	-0.23181	-0.22486
486.7727	86.4742	315.3969	39.6844	0.0349	-0.9994	0.0000	-0.25849	-0.22633	-0.25168	-0.22911
499.3278	86.9127	315.4430	37.5988	0.0349	-0.9994	0.0000	-0.26936	-0.23002	-0.28340	-0.22795
509.5863	87.2709	315.5940	22.5629	0.0349	-0.9994	0.0000	-0.25944	-0.25999	-0.30338	-0.26843



pylon for upper

X	Y	Z	AREA	EX	EY	EZ	CP1	CP2	CP3	CP4
405.3636	68.0848	257.3818	2.1302	-0.9991	0.0003	0.0436	0.83153	0.75812	0.28509	1.02763
405.4189	67.7939	258.1700	2.3591	-0.9955	0.0003	0.0946	0.71578	0.66488	0.16700	0.95166
405.5279	67.4705	259.0208	2.6295	-0.9876	0.0003	0.1569	0.67323	0.61661	0.13805	0.94321
405.7138	67.1111	259.8382	2.9576	-0.9716	0.0004	0.2367	0.57055	0.52576	0.05666	0.87171
406.0002	66.7111	260.9263	3.3562	-0.9487	0.0004	0.3162	0.48464	0.44689	0.01759	0.80926
406.3986	66.2623	263.1477	3.8548	-0.9252	0.0005	0.3796	0.38450	0.35829	-0.03440	0.72240
406.9357	65.7580	265.7641	4.4786	-0.8882	0.0006	0.4595	0.26458	0.25246	-0.10384	0.62301
407.6607	65.1888	268.3982	5.3459	-0.8434	0.0006	0.5373	0.15229	0.15672	-0.15717	0.52213
408.6078	64.5382	265.7641	6.4252	-0.8014	0.0009	0.5981	0.05086	0.07025	-0.17603	0.42207
409.8381	63.7863	267.2582	7.9340	-0.7451	0.0008	0.6669	-0.07786	-0.04198	-0.23647	0.29286
411.4410	62.9047	268.9042	10.0196	-0.6910	0.0010	0.7228	-0.16526	-0.11932	-0.23433	0.19046
413.5298	61.8637	270.7238	12.9469	-0.6272	0.0009	0.7789	-0.25870	-0.20357	-0.25566	0.07660
416.2596	60.6291	272.7237	17.1001	-0.5637	0.0009	0.8260	-0.33748	-0.28185	-0.25111	-0.03100
419.8252	59.1547	274.9507	23.0552	-0.4982	0.0009	0.8671	-0.38913	-0.34301	-0.24556	-0.12583
424.4854	57.4409	277.3850	31.6675	-0.4339	0.0013	0.9010	-0.41085	-0.38086	-0.21971	-0.20188
430.5391	55.4768	279.9862	43.5830	-0.3624	0.0008	0.9320	-0.43587	-0.42475	-0.23216	-0.27577
438.2630	53.1964	282.6677	59.8393	-0.2995	0.0003	0.9541	-0.41572	-0.41105	-0.23388	-0.32574
447.9002	50.6262	285.3239	81.4309	-0.2375	0.0004	0.9714	-0.37701	-0.35059	-0.20735	-0.36958
459.6024	47.9262	287.7880	108.0938	-0.1790	0.0011	0.9839	-0.34484	-0.28955	-0.17731	-0.39264
473.3315	45.4708	289.8006	137.4689	-0.1148	0.0011	0.9934	-0.34480	-0.27727	-0.28597	-0.29310
488.7430	43.7873	291.1021	163.6295	-0.0558	0.0004	0.9984	-0.34041	-0.29268	-0.33042	-0.29672
505.1122	43.2819	291.5533	179.1431	-0.0001	0.0001	1.0000	-0.33662	-0.29496	-0.37807	-0.29744
521.4813	44.1483	291.0950	179.2331	0.0567	0.0003	0.9999	-0.33213	-0.28776	-0.43053	-0.28808
536.5912	46.1623	289.7937	158.7496	0.1187	-0.0006	0.9929	-0.33213	-0.28776	-0.43053	-0.28808
405.3644	70.3356	257.3840	2.0608	-0.9990	0.0002	0.0436	0.86981	0.80852	0.29110	1.06150
405.4205	70.6031	258.1783	2.2824	-0.9954	0.0003	0.0946	0.74592	0.70615	0.14270	0.97156
405.5313	70.3451	259.0362	2.6437	-0.9874	0.0003	0.1582	0.69535	0.65338	0.08140	0.96195
405.7207	70.0591	259.8362	3.0437	-0.9710	0.0004	0.2390	0.57398	0.54803	-0.03236	0.87824
406.0122	69.7416	260.9582	3.4440	-0.9480	0.0004	0.3182	0.47517	0.45890	-0.09454	0.80928
406.4124	69.3362	262.0353	3.7240	-0.9240	0.0005	0.3823	0.36491	0.36281	-0.16318	0.71546
406.7643	68.9883	263.1986	4.3221	-0.8861	0.0005	0.4635	0.22874	0.24299	-0.25596	0.60900
407.7014	68.5409	264.4587	5.1521	-0.8415	0.0005	0.5403	0.10450	0.13587	-0.31939	0.50336
408.6640	68.0315	265.8341	6.1847	-0.7987	0.0008	0.6017	-0.00711	0.04021	-0.34920	0.39790
409.9132	67.4454	267.3375	7.6241	-0.7423	0.0007	0.6701	-0.14504	-0.08097	-0.41423	0.26297
411.5389	66.7616	268.9923	9.6105	-0.6879	0.0009	0.7258	-0.25000	-0.17519	-0.42523	0.14675
413.6548	65.9591	270.8199	12.3879	-0.6241	0.0007	0.7814	-0.35714	-0.27420	-0.45533	0.02081
416.4166	65.0145	272.8360	16.3159	-0.5605	0.0008	0.8282	-0.43818	-0.35648	-0.44939	-0.07189
420.0193	63.8966	275.0570	21.9268	-0.4951	0.0008	0.8688	-0.49811	-0.42938	-0.44335	-0.17189
424.7190	62.6145	277.4901	29.9770	-0.4307	0.0011	0.9025	-0.52932	-0.48375	-0.42144	-0.29005
430.8106	61.1707	280.0870	41.0749	-0.3604	0.0007	0.9328	-0.54632	-0.51731	-0.40446	-0.37893
438.5722	59.5266	282.7625	56.1405	-0.2974	0.0002	0.9548	-0.52932	-0.48721	-0.39803	-0.43035
448.2448	57.7200	285.4055	75.9701	-0.2354	0.0003	0.9843	-0.48388	-0.47747	-0.39419	-0.44404
459.9700	55.8941	287.8458	100.2050	-0.1766	0.0003	0.9935	-0.44120	-0.41045	-0.38993	-0.42298
473.6928	54.3511	289.8329	126.5143	-0.1137	0.0010	0.9935	-0.42605	-0.37883	-0.40769	-0.39956
489.0552	53.4931	291.1157	149.5345	-0.0550	0.0004	0.9985	-0.40837	-0.36785	-0.41593	-0.37975
505.3416	53.5991	291.0839	162.7450	0.0006	0.0001	1.0000	-0.40837	-0.36097	-0.42072	-0.36592
521.6207	54.7638	289.7937	162.1622	0.0577	0.0003	0.9983	-0.38997	-0.34776	-0.42924	-0.35091
536.0919	56.7131	289.8006	131.2804	0.1171	-0.0007	0.9931	-0.36971	-0.32255	-0.43817	-0.32348
405.3652	73.4297	257.3860	2.1917	-0.9990	0.0003	0.0440	0.91027	0.85572	0.29927	1.11078
405.4221	73.7248	258.1862	2.4220	-0.9954	0.0003	0.0959	0.79020	0.75381	0.16064	1.01767
405.5326	73.0504	259.0507	2.7637	-0.9872	0.0003	0.1596	0.74756	0.70934	0.10827	1.01290
405.7272	72.8313	259.8835	3.1655	-0.9705	0.0004	0.2411	0.62059	0.59895	0.00450	0.91991
406.0234	72.5890	260.9882	3.6555	-0.9474	0.0004	0.3202	0.52054	0.50878	-0.07107	0.85164
406.4349	72.3189	262.0742	4.1508	-0.9230	0.0004	0.3849	0.40492	0.40823	-0.14916	0.75687
406.9911	72.0177	263.2464	4.7569	-0.8842	0.0005	0.4671	0.26191	0.28251	-0.24684	0.65004
407.7397	71.6808	264.5154	5.7569	-0.8397	0.0004	0.5430	0.13062	0.16840	-0.31081	0.54036
408.7165	71.2994	265.8997	6.9991	-0.7962	0.0006	0.6051	0.00987	0.06405	-0.34761	0.42761
409.9832	70.8632	267.4115	8.8084	-0.7397	0.0006	0.6730	-0.13547	-0.06481	-0.42378	0.28768
411.6301	70.3579	269.0745	11.8084	-0.6850	0.0007	0.7286	-0.25084	-0.20603	-0.47199	0.16324
413.7712	69.7697	270.9092	14.8360	-0.6212	0.0006	0.7837	-0.36864	-0.37165	-0.46151	0.07998
416.5624	69.0846	272.9310	19.8379	-0.5575	0.0006	0.8302	-0.45328	-0.45375	-0.46091	-0.09367
420.1988	68.2840	275.1554	26.9379	-0.4922	0.0009	0.8705	-0.52328	-0.51605	-0.46091	-0.21048
424.9342	67.3834	277.5870	36.6455	-0.4270	0.0006	0.9039	-0.55823	-0.51605	-0.44156	-0.31301
431.0598	66.3954	280.1796	46.5902	-0.3586	0.0001	0.9335	-0.57278	-0.51605	-0.43489	-0.40780
438.8543	65.3037	282.8489	66.5955	-0.2955	0.0001	0.9553	-0.54671	-0.51605	-0.40904	-0.46462
448.5572	64.1530	285.4786	86.8742	-0.2334	0.0001	0.9724	-0.50560	-0.50199	-0.40000	-0.47567
459.3014	62.8841	287.8980	108.3243	-0.1745	0.0009	0.9847	-0.46736	-0.42446	-0.39238	-0.44588
474.7274	62.0930	291.1278	135.9858	-0.1127	0.0010	0.9936	-0.45005	-0.38627	-0.40321	-0.41179
489.9321	62.6673	291.5517	126.4203	-0.0543	0.0003	0.9985	-0.43484	-0.37412	-0.40783	-0.38713
505.5434	64.0233	291.0741	135.9858	0.0013	0.0001	1.0000	-0.41870	-0.36662	-0.41123	-0.37162
521.7425	65.8410	289.9171	134.1585	0.0584	0.0003	0.9983	-0.40286	-0.35246	-0.42713	-0.35502
536.6623	68.7816	257.3879	99.3102	0.1155	-0.0008	0.9933	-0.38210	-0.32465	-0.43756	-0.32340
405.3659	75.6488	258.1933	1.7187	-0.9990	0.0003	0.0442	0.95619	0.90819	0.31047	1.15685
405.4235	75.5022	259.0639	1.9015	-0.9953	0.0003	0.0963	0.82946	0.79977	0.16972	1.05992
405.5375	75.3411	260.0033	2.1166	-0.9870	0.0003	0.1607	0.78889	0.75794	0.12989	1.05051
405.7332	75.1639	262.1093	2.3755	-0.9700	0.0004	0.2429	0.65390	0.64006	0.01454	0.94733
406.0335	74.9674	263.2894	2.6885	-0.9468	0.0003	0.3219	0.55075	0.54699	-0.06621	0.88007
406.4509	74.7496	264.5664	3.0791	-0.9220	0.0004	0.3871	0.43015	0.43015	-0.15834	0.78739
407.0153	74.5078	265.9586	3.5613	-0.8825	0.0004	0.4703	0.28107	0.30564	-0.26045	0.67850
407.7742	74.2361	267.4779	4.2271	-0.8382	0.0004	0.5454	0.14401	0.18929	-0.32581	0.56240
408.7636	73.9280	269.1479	5.0525	-0.7939	0.0005	0.6080	0.01543	0.07690	-0.37171	0.44167
410.0461	73.5744	270.9889	6.1944	-0.7374	0.0005	0.6750	-0.13613	-0.05833	-0.44099	0.29665
411.7117	73.1674	273.0133	7.7602	-0.6824	0.0005	0.7310	-0.25902	-0.17114	-0.45972	0.16658
413.8750	72.7002	275.2425	9.9505	-0.6186	0.0005	0.7857	-0.38397	-0.29063	-0.49399	0.02470
416.6918	72.1640	277.7235	12.2134	-0.5549	0.0005	0.8319	-0.47853	-0.38969	-0.49537	-0.10428
420.3576	71.5773	280.2604	17.1878	-0.4897	0.0008	0.8719	-0.54902	-0.47743	-0.49612	-0.22739
425.1235	70.9589	282.9239	23.1878	-0.4252	0.0005	0.9051	-0.58670	-0.54566	-0.47865	-0.33665
431.7774	70.3080	285.5432	31.2687	-0.3570	0.0005	0.9341	-0.59798	-0.59793	-0.46810	-0.43402
439.0988	69.6710	287.9423	41.9726	-0.2939	0.0000	0.9558	-0.56920	-0.59332	-0.44093	-0.49354
448.8752	69.1516	289.8862	55.5596	-0.2318	0.0000	0.9728	-0.52547	-0.53064	-0.42848	-0.50496
460.5820	68.927									

406.4647	77.2786	262.1399	2.6583	-0.9212	0.0004	0.3891	0.43123	0.45670	-0.16386	0.80769
407.0364	77.1298	263.3269	3.0691	-0.8810	0.0004	0.4730	0.28006	0.32127	-0.26869	0.69346
407.8042	76.9664	264.6108	3.6346	-0.8368	0.0003	0.5475	0.14240	0.19825	-0.33323	0.57187
408.8045	76.7848	266.0098	4.3342	-0.7920	0.0005	0.6106	0.01115	0.08152	-0.38264	0.44699
410.1005	76.5813	267.5354	5.2982	-0.7354	0.0004	0.6777	-0.14218	-0.05744	-0.45335	0.30068
411.7821	76.3510	269.2114	6.6152	-0.6802	0.0005	0.7330	-0.26804	-0.17445	-0.47716	0.16735
413.9643	76.0904	271.0574	8.4244	-0.6164	0.0004	0.7874	-0.39540	-0.29732	-0.51391	0.02073
416.8026	75.7976	273.0876	10.9375	-0.5527	0.0003	0.8334	-0.49176	-0.40148	-0.51444	-0.11263
420.4928	75.4704	275.3166	14.4492	-0.4876	0.0004	0.8731	-0.56281	-0.49117	-0.51133	-0.23890
425.2838	75.1282	277.7445	19.3067	-0.4230	0.0007	0.9061	-0.60020	-0.56167	-0.49211	-0.35114
431.4602	74.7919	280.3284	25.7950	-0.3587	0.0004	0.9346	-0.60853	-0.61333	-0.47880	-0.44910
439.3020	74.4697	282.9863	34.2144	-0.2925	-0.0001	0.9563	-0.57838	-0.60703	-0.45266	-0.50952
449.0454	74.2049	285.5954	44.7195	-0.2304	0.0000	0.9731	-0.53257	-0.53923	-0.42981	-0.58332
460.8095	74.0797	287.9783	56.0679	-0.1712	0.0007	0.9851	-0.48567	-0.45087	-0.43735	-0.47987
474.5019	74.2216	289.9056	68.4482	-0.1122	0.0009	0.9938	-0.46598	-0.40293	-0.42697	-0.43232
489.7407	74.7611	291.1457	79.0980	-0.0533	0.0003	0.9986	-0.44940	-0.38812	-0.42455	-0.40106
505.8351	75.7367	291.5508	88.1858	0.0023	0.0000	1.0000	-0.43048	-0.37653	-0.41959	-0.38023
521.9149	77.0872	291.0605	97.6698	0.0594	0.0003	0.9982	-0.40766	-0.35438	-0.43011	-0.35486
535.0737	78.4790	289.9954	107.2578	0.1127	-0.0009	0.9936	-0.36561	-0.30819	-0.41467	-0.30272
405.3670	79.6087	257.3910	1.2578	-0.9990	0.0003	0.0445	0.93644	0.92789	0.35374	1.19443
405.4257	79.5455	258.2049	1.3899	-0.9953	0.0003	0.0972	0.80845	0.81792	0.20058	1.08895
405.5424	79.4769	259.0852	1.5446	-0.9867	0.0003	0.1625	0.76091	0.77246	0.18659	1.06317
405.7427	79.4029	260.0354	1.7302	-0.9693	0.0003	0.2459	0.62479	0.65157	0.04915	0.96085
406.0499	79.3234	261.0592	1.9535	-0.9459	0.0003	0.3246	0.51923	0.55411	-0.05927	0.90293
406.4765	79.2369	262.1658	2.2315	-0.9205	0.0003	0.3907	0.40048	0.44681	-0.16468	0.81196
407.0543	79.1434	263.3587	2.5722	-0.8798	0.0003	0.4753	0.25379	0.31191	-0.27223	0.69047
407.8296	79.0427	264.6483	3.0399	-0.8357	0.0003	0.5492	0.12142	0.19011	-0.33897	0.56628
408.8390	78.9328	266.0529	3.6174	-0.7903	0.0004	0.6127	-0.00723	0.07265	-0.39163	0.44132
410.1462	78.8123	267.5837	4.4103	-0.7337	0.0003	0.6795	-0.15686	-0.06604	-0.46275	0.29616
411.8411	78.6791	269.2645	5.4896	-0.6784	0.0004	0.7347	-0.28101	-0.18384	-0.49103	0.16156
414.0389	78.5329	271.1147	6.9640	-0.6146	0.0003	0.7888	-0.40705	-0.30814	-0.53269	0.01298
416.8948	78.3749	273.1477	8.9994	-0.5509	0.0002	0.8346	-0.50267	-0.41303	-0.53534	-0.12244
420.6047	78.2074	275.3780	11.8213	-0.4859	0.0003	0.8740	-0.57254	-0.50344	-0.52892	-0.24955
425.4156	78.0483	277.8038	15.6761	-0.4212	0.0006	0.9070	-0.60905	-0.57328	-0.50674	-0.36265
431.6092	77.9179	280.3838	20.7600	-0.3546	0.0003	0.9350	-0.61513	-0.62336	-0.49029	-0.45990
439.4661	77.8289	283.0367	27.2684	-0.2914	-0.0001	0.9566	-0.58398	-0.61533	-0.46416	-0.51972
449.2209	77.8176	285.6371	35.1255	-0.2393	0.0001	0.9734	-0.53691	-0.54544	-0.44357	-0.58534
460.9881	77.9285	288.0207	45.6904	-0.1790	0.0006	0.9854	-0.49281	-0.45504	-0.43357	-0.48534
474.6982	78.2986	289.9056	57.5545	-0.1107	0.0009	0.9939	-0.46574	-0.40519	-0.43008	-0.43512
489.8763	78.9544	291.1457	68.0529	-0.0529	0.0003	0.9986	-0.45059	-0.38983	-0.42601	-0.40268
505.9788	79.9211	291.5505	79.0556	0.0026	0.0000	1.0000	-0.43003	-0.37667	-0.41887	-0.38005
521.9684	81.1277	291.0562	88.1813	0.0597	0.0002	0.9982	-0.40329	-0.35140	-0.42711	-0.35144
535.8994	82.2757	290.0185	97.6507	0.1117	-0.0009	0.9937	-0.35241	-0.29652	-0.40904	-0.28971
405.3674	81.0713	257.3921	1.0356	-0.9990	0.0003	0.0445	0.83282	0.86925	0.37814	1.18451
405.4265	81.0328	258.2093	1.1438	-0.9952	0.0003	0.0976	0.73135	0.77433	0.21981	1.07991
405.5442	80.9918	259.0933	1.2703	-0.9866	0.0003	0.1632	0.68535	0.73007	0.20520	1.05357
405.7463	80.9485	260.0476	1.4217	-0.9690	0.0003	0.2471	0.56818	0.62024	0.05408	0.95538
406.0562	80.9033	261.0758	1.6037	-0.9455	0.0003	0.3256	0.46950	0.52585	-0.05900	0.89622
406.4862	80.8555	262.1872	1.8300	-0.9199	0.0003	0.3921	0.35792	0.42163	-0.16138	0.80140
407.0690	80.8055	263.3849	2.1064	-0.8788	0.0003	0.4772	0.22009	0.29088	-0.27125	0.67593
407.8505	80.7539	264.6791	2.4852	-0.8347	0.0003	0.5506	0.09598	0.17269	-0.34140	0.55286
408.8674	80.6999	266.0883	2.9519	-0.7890	0.0003	0.6144	-0.02808	0.05645	-0.39974	0.42920
410.1837	80.6437	267.5234	3.5908	-0.7324	0.0002	0.6809	-0.17141	-0.07939	-0.47309	0.28508
411.8895	80.5855	269.3081	4.4578	-0.6769	0.0003	0.7361	-0.29264	-0.19616	-0.50256	0.14983
414.0997	80.5267	271.1614	5.6362	-0.6131	0.0002	0.7900	-0.41666	-0.32009	-0.54359	0.00133
416.9698	80.4708	273.1966	7.5740	-0.5494	0.0002	0.8356	-0.51112	-0.42479	-0.54514	-0.13422
420.6953	80.4225	275.4277	9.4812	-0.4844	0.0002	0.8748	-0.57916	-0.51401	-0.53636	-0.26069
425.5215	80.3973	277.8516	12.4895	-0.4197	0.0005	0.9077	-0.61373	-0.58217	-0.51337	-0.37274
431.7281	80.4131	280.4280	16.4094	-0.3537	0.0003	0.9354	-0.61720	-0.62954	-0.49544	-0.46788
439.5957	80.4835	283.0766	21.3434	-0.2905	-0.0002	0.9569	-0.58478	-0.61909	-0.46916	-0.52588
449.3579	80.6369	285.6697	28.1469	-0.2388	0.0006	0.9736	-0.53693	-0.54544	-0.44357	-0.58534
460.9881	80.7285	288.0207	37.2439	-0.1792	0.0006	0.9856	-0.49476	-0.45504	-0.43357	-0.48534
474.7336	80.9706	289.9320	48.4200	-0.1103	0.0008	0.9939	-0.46594	-0.40423	-0.43070	-0.43486
489.9763	82.0444	291.1562	57.1738	-0.0527	0.0003	0.9986	-0.44875	-0.38907	-0.42639	-0.40215
505.9963	82.9234	291.5503	68.0406	0.0028	0.0000	1.0000	-0.42761	-0.37535	-0.41789	-0.37879
521.0060	83.9451	291.0533	79.0275	0.0600	0.0002	0.9982	-0.39791	-0.34729	-0.42287	-0.34742
535.7821	84.8592	290.0341	88.1351	0.1110	-0.0009	0.9938	-0.33677	-0.28256	-0.39739	-0.27530
405.3678	82.2607	257.3931	0.8359	-0.9990	0.0003	0.0446	0.74956	0.81108	0.39910	1.16997
405.4272	82.2415	258.2129	0.9228	-0.9952	0.0003	0.0978	0.68514	0.73549	0.23365	1.06961
405.5457	82.2219	259.0999	1.0244	-0.9865	0.0003	0.1638	0.64390	0.69482	0.21016	1.04782
405.7493	82.2026	260.0575	1.1457	-0.9688	0.0003	0.2480	0.54891	0.59711	0.05234	0.95023
406.0612	82.1841	261.0893	1.2914	-0.9452	0.0003	0.3264	0.45802	0.50727	-0.05852	0.88513
406.4940	82.1663	262.2046	1.4723	-0.9195	0.0003	0.3932	0.35146	0.40560	-0.15786	0.78685
407.0809	82.1500	263.4060	1.6927	-0.8780	0.0002	0.4787	0.21994	0.27940	-0.26957	0.66257
407.8674	82.1362	264.7041	1.9943	-0.8340	0.0002	0.5518	0.09686	0.16463	-0.34006	0.54338
408.8903	82.1252	266.1169	2.3653	-0.7879	0.0003	0.6157	-0.02852	0.04903	-0.40137	0.42146
410.2139	82.1183	267.5553	2.8718	-0.7313	0.0002	0.6821	-0.17360	-0.08663	-0.47850	0.27804
411.9283	82.1171	269.3430	3.5574	-0.6757	0.0003	0.7372	-0.29604	-0.20392	-0.51030	0.14272
414.1485	82.1243	271.1989	4.4852	-0.6119	0.0001	0.7909	-0.42083	-0.32811	-0.54983	-0.00544
417.0297	82.1447	273.2357	5.7532	-0.5482	0.0001	0.8364	-0.51477	-0.43220	-0.54817	-0.14101
420.7673	82.1842	275.4674	7.4878	-0.4833	0.0001	0.8754	-0.58178	-0.52028	-0.53672	-0.26690
425.6053	82.2566	277.8894	9.8087	-0.4186	0.0004	0.9082	-0.61498	-0.58702	-0.51387	-0.37809
431.8216	82.3735	280.4628	12.7992	-0.3530	0.0002	0.9356	-0.61695	-0.63273	-0.49608	-0.47185
439.6967	82.5005	283.1076	16.5052	-0.2899	-0.0002	0.9571	-0.58382	-0.62097	-0.47064	-0.52880
449.4633	82.8066	285.6949	20.7574	-0.2278	0.0005	0.9737	-0.53503	-0.54767	-0.45347	-0.53208
461.2294	83.1665	288.0450	25.0437	-0.1685	0.0005	0.9857	-0.48998	-0.45488	-0.43718	-0.48765
474.8871	83.6563	289.9405	32.4123	-0.1100	0.0008	0.9939	-0.46408	-0.40387	-0.43116	-0.43486
490.0492	84.2898	291.1595	39.7433	-0.0525	0.0003	0.9986	-0.44719	-0.38866	-0.42669	-0.40193
506.0442	85.0456	291.5502	46.3681	0.0030	0.0000	1.0000	-0.42597	-0.37449	-0.41725	-0.37802
522.0318	85.8731	291.0513	54.6134	0.0601	-0.0002	0.9982	-0.39453	-0.34491	-0.41915	-0.34509
534.7053	86.5766	290.0443	63.1733	0.1105	-0.0009	0.9939	-0.33310	-0.27869	-0.40248	-0.27124
405.3680	83.2113	257.3938	0.6640	-0.9990	0.0002	0.0447	0.74225	0.79531	0.41320	

431.8942	83.8956	280.4897	9.8846	-0.3525	0.0002	0.9358	-0.61572	-0.63418	-0.49572	-0.47530
439.7744	84.1431	283.1315	12.6537	-0.2893	-0.0003	0.9572	-0.58158	-0.62035	-0.47060	-0.53034
449.5437	84.4612	285.7140	15.7588	-0.2273	-0.0002	0.9738	-0.53251	-0.54587	-0.45379	-0.53198
461.3077	84.8603	288.0574	18.7684	-0.1680	0.0005	0.9858	-0.48781	-0.45307	-0.43780	-0.46673
474.9562	85.3456	289.9468	20.9315	-0.1097	0.0008	0.9940	-0.46236	-0.40264	-0.43151	-0.43384
490.1019	85.9121	291.1619	21.4295	-0.0524	0.0002	0.9986	-0.44556	-0.38792	-0.42680	-0.40117
506.0779	86.5355	291.5502	19.8611	0.0031	0.0000	1.0000	-0.42486	-0.37375	-0.41632	-0.37717
522.0494	87.1796	291.0500	16.6147	0.0602	0.0002	0.9982	-0.39074	-0.34188	-0.41364	-0.34195
534.6558	87.7018	290.0508	8.4641	0.1101	-0.0009	0.9939	-0.32369	-0.26964	-0.39696	-0.26182

plate top upper

X	Y	Z	AREA	EX	EY	EZ	CP1	CP2	CP3	CP4
367.7747	81.6282	258.1519	10.6251	-0.3599	0.9330	0.0066	0.26706	0.19875	-0.16975	0.06042
372.7270	83.1636	258.1020	12.8551	-0.2462	0.9690	0.0199	0.19891	0.20210	-0.44141	0.28731
378.7310	84.3787	258.0790	14.1873	-0.1521	0.9881	0.0232	0.35561	0.46843	-0.48680	0.22222
385.2077	85.1825	258.0709	14.1207	-0.0948	0.9954	0.0099	0.40519	0.60984	-0.46881	0.21992
391.2388	85.6149	258.0555	11.9824	-0.0443	0.9990	0.0019	0.37079	0.47687	-0.34375	0.68962
396.1743	85.8128	258.0101	8.8096	-0.0345	0.9994	-0.0006	0.26902	0.27540	-0.30556	0.44987
399.8291	85.9396	257.9290	5.6277	-0.0349	0.9994	0.0000	0.20384	0.23657	-0.29670	0.40045
402.3386	86.0272	257.8508	3.3810	-0.0349	0.9994	0.0000	0.13350	0.21433	-0.28424	0.27731
403.9727	86.0843	257.8497	2.2433	-0.0349	0.9994	0.0000	0.15003	0.20731	-0.28070	0.26261
404.6738	86.1088	258.2402	1.1049	-0.0349	0.9994	0.0000	0.17526	0.20372	-0.27436	0.26161
404.8010	86.1132	259.0110	1.0756	-0.0349	0.9994	0.0000	0.17226	0.19847	-0.27017	0.25597
404.9394	86.1180	259.8841	1.2095	-0.0349	0.9994	0.0000	0.16533	0.19321	-0.26484	0.25019
405.1398	86.1250	260.8598	1.4635	-0.0349	0.9994	0.0000	0.16176	0.18745	-0.25964	0.24315
405.4429	86.1356	261.9289	1.7939	-0.0349	0.9994	0.0000	0.15791	0.18110	-0.25396	0.23468
405.8750	86.1507	263.0941	2.1898	-0.0349	0.9994	0.0000	0.15373	0.17418	-0.24798	0.22475
406.4730	86.1716	264.3530	2.6728	-0.0349	0.9994	0.0000	0.14927	0.16687	-0.24177	0.21354
407.2799	86.1997	265.7118	3.2742	-0.0349	0.9994	0.0000	0.14453	0.15932	-0.23510	0.20145
408.3344	86.2366	267.1868	3.9875	-0.0349	0.9994	0.0000	0.13970	0.15189	-0.22836	0.18903
409.6998	86.2843	268.7878	4.9205	-0.0349	0.9994	0.0000	0.13465	0.14469	-0.22103	0.17682
411.4638	86.3455	270.5358	6.1241	-0.0349	0.9994	0.0000	0.12954	0.13787	-0.21324	0.16505
413.7399	86.4253	272.4474	7.6964	-0.0349	0.9994	0.0000	0.12434	0.13151	-0.20503	0.15455
416.6789	86.5280	274.5328	9.7457	-0.0349	0.9994	0.0000	0.11914	0.12542	-0.19603	0.14575
420.7317	86.6604	276.8019	12.4026	-0.0349	0.9994	0.0000	0.11396	0.11892	-0.18697	0.13791
423.5545	86.8310	279.2470	15.7571	-0.0349	0.9994	0.0000	0.10907	0.11157	-0.17757	0.13042
429.5969	87.0489	281.8278	19.8315	-0.0349	0.9994	0.0000	0.10430	0.10301	-0.16857	0.12235
439.4756	87.3241	284.4670	24.5388	-0.0349	0.9994	0.0000	0.10152	0.09417	-0.15524	0.11375
449.2227	87.6644	287.0402	29.6387	-0.0349	0.9994	0.0000	0.09990	0.08594	-0.14859	0.10482
460.9445	88.0738	289.3765	34.7690	-0.0349	0.9994	0.0000	0.10113	0.08047	-0.14782	0.09707
474.5340	88.5483	291.2712	39.4357	-0.0349	0.9994	0.0000	0.10463	0.07740	-0.15048	0.08963
489.6136	89.0755	292.5131	43.1401	-0.0348	0.9994	0.0001	0.11680	0.08299	-0.16826	0.08979
505.5244	89.6311	292.9530	45.2830	-0.0348	0.9994	0.0000	0.13725	0.09620	-0.19301	0.09384
521.3661	90.1837	292.5079	44.3097	-0.0349	0.9994	0.0000	0.16634	0.12059	-0.17454	0.11705
533.6139	90.6114	291.4427	22.5553	-0.0356	0.9969	0.0069	0.28197	0.20875	-0.15328	0.06368
567.7035	81.5846	260.4351	1.9192	-0.2482	0.9685	0.0215	0.17865	0.18244	-0.42996	0.28123
372.4400	83.0503	260.2607	11.3185	-0.1610	0.9866	0.0243	0.38213	0.44916	-0.48535	0.50219
378.1596	84.2337	260.2116	13.9163	-0.1080	0.9941	0.0107	0.40310	0.54836	-0.44071	0.60531
384.3895	85.0766	260.2398	12.4075	-0.0523	0.9986	0.0020	0.38864	0.62404	-0.43697	0.69090
390.2843	85.5643	260.2706	9.7033	-0.0336	0.9994	-0.0003	0.29732	0.53454	-0.36178	0.68419
395.0775	85.7763	260.0662	6.7099	-0.0349	0.9994	0.0000	0.22172	0.33458	-0.31722	0.54344
398.6238	85.8827	259.8939	4.4299	-0.0349	0.9994	0.0000	0.20457	0.26111	-0.30179	0.38066
401.0654	85.9361	259.8759	3.0613	-0.0349	0.9994	0.0000	0.19083	0.23429	-0.28743	0.29419
402.6655	86.0661	260.2327	1.5001	-0.0348	0.9994	0.0000	0.18304	0.22159	-0.28032	0.28652
403.4515	86.0759	260.9240	1.3370	-0.0349	0.9994	0.0000	0.18000	0.21619	-0.26859	0.27700
403.9612	86.0839	261.7830	1.3763	-0.0348	0.9994	0.0000	0.17529	0.20900	-0.26338	0.26821
404.2225	86.0930	262.8028	1.5389	-0.0348	0.9994	0.0000	0.17100	0.20197	-0.25607	0.25816
404.5770	86.1054	263.9570	1.7961	-0.0349	0.9994	0.0000	0.16640	0.19443	-0.24653	0.24671
405.0680	86.1225	265.2320	2.1554	-0.0348	0.9994	0.0000	0.16148	0.18630	-0.23600	0.23394
405.7359	86.1458	266.6147	2.6357	-0.0349	0.9994	0.0000	0.15631	0.17778	-0.22634	0.22018
406.6206	86.1767	268.1024	3.2641	-0.0349	0.9994	0.0000	0.15098	0.16913	-0.21679	0.20607
407.7651	86.2167	269.7048	4.0598	-0.0349	0.9994	0.0000	0.14559	0.16067	-0.20758	0.19215
409.2299	86.2679	271.4279	5.0928	-0.0349	0.9994	0.0000	0.14021	0.15267	-0.22280	0.17898
411.0973	86.3331	273.2847	6.4681	-0.0349	0.9994	0.0000	0.13484	0.14527	-0.21564	0.16715
413.4736	86.4161	275.2846	8.0973	-0.0349	0.9994	0.0000	0.12956	0.13861	-0.20829	0.15691
416.4954	86.5216	277.4303	10.0923	-0.0349	0.9994	0.0000	0.12433	0.13252	-0.20033	0.14813
420.3370	86.6557	282.1451	13.2933	-0.0349	0.9994	0.0000	0.11918	0.12660	-0.19171	0.14012
425.2158	86.8261	287.1451	16.6973	-0.0349	0.9994	0.0000	0.11413	0.12014	-0.18217	0.13218
431.3886	87.0417	292.6604	20.5965	-0.0349	0.9994	0.0000	0.10940	0.11272	-0.17218	0.12351
439.1375	87.3123	298.2012	24.7512	-0.0349	0.9994	0.0000	0.10510	0.10406	-0.16201	0.11441
448.0433	87.6467	299.6671	28.7766	-0.0349	0.9994	0.0000	0.10187	0.09496	-0.15310	0.10335
460.2335	88.0492	291.9137	32.2809	-0.0349	0.9994	0.0000	0.09990	0.08611	-0.14671	0.09359
473.6124	88.5162	293.7584	34.9959	-0.0349	0.9994	0.0000	0.10090	0.08004	-0.14628	0.08504
488.4673	89.0354	295.0115	36.8699	-0.0349	0.9994	0.0000	0.10405	0.07648	-0.16729	0.08643
504.1526	89.5831	295.5350	37.7666	-0.0349	0.9994	0.0000	0.11473	0.08777	-0.19613	0.09088
519.6611	90.1243	295.2125	35.9847	-0.0349	0.9994	0.0000	0.12363	0.09557	-0.19696	0.12297
531.4707	90.5366	294.1148	18.4046	-0.0349	0.9994	-0.0000	0.0211	0.29004	-0.14641	0.04791
367.7996	81.6354	262.6673	19.4573	-0.3404	0.9695	0.0660	0.16645	0.17316	-0.41675	0.27504
372.3199	82.9897	262.3447	10.8422	-0.1669	0.9858	0.0191	0.36598	0.43451	-0.47570	0.48552
377.7306	84.1168	262.3086	12.4241	-0.1195	0.9928	0.0112	0.39130	0.53206	-0.43370	0.58662
383.7225	84.9765	262.4728	13.5597	-0.0623	0.9981	0.0111	0.39220	0.62615	-0.43789	0.68214
389.4694	85.5145	262.6961	11.5959	-0.0328	0.9995	0.0001	0.31101	0.56273	-0.37199	0.69805
394.1119	85.7445	262.8361	8.8647	-0.0348	0.9994	0.0000	0.22948	0.36207	-0.31537	0.58080
397.5500	85.8601	262.8232	6.3061	-0.0349	0.9994	0.0000	0.20942	0.27170	-0.30461	0.42590
399.9296	85.9431	262.7492	4.2982	-0.0349	0.9994	0.0000	0.19651	0.24341	-0.29090	0.33350
401.5031	85.9981	262.6041	2.1336	-0.0349	0.9994	0.0000	0.18836	0.22858	-0.28347	0.31033
402.3684	86.0283	263.0492	1.8572	-0.0349	0.9994	0.0000	0.18366	0.22096	-0.27757	0.29907
402.8116	86.0437	263.6747	1.8422	-0.0349	0.9994	0.0000	0.17774	0.21160	-0.27045	0.28544
403.1992	86.0573	264.5318	1.9881	-0.0348	0.9994	0.0000	0.17224	0.20244	-0.26398	0.27259
403.6150	86.0718	265.6063	2.2584	-0.0349	0.9994	0.0000	0.16648	0.19311	-0.25685	0.25905
404.1214	86.0895	266.8612	2.6578	-0.0349	0.9994	0.0000	0.16068	0.18371	-0.24982	0.24470
404.7650	86.1120	268.2632	3.1987	-0.0348	0.9994	0.0000	0.15486	0.17446	-0.24264	0.22985
405.5857	86.1406	269.7840	3.9034	-0.0350	0.9994	0.0000	0.14903	0.16555	-0.23531	0.21492
406.6225	86.1768	271.4081	4.7924	-0.0350	0.9994	0.0000	0.14347	0.15742	-0.22811	0.20071
407.9190	86.2221	273.1324	5.9245	-0.0349	0.9994	0.0000	0.13802	0.15006	-0.22075	0.18752
409.5310	86.2784	274.9543	7.3408	-0.0349	0.9994	0.0000	0.13282	0.14357	-0.21324	0.17581
411.5301	86.3482	276.8753	9.0995	-0.0349	0.9994	0.0000	0.12789	0.13791	-0.20558	0.16583
414.0066	86.4347	278.8939	11.2486	-0.0349	0.9994	0.0000	0.12318	0.13267	-0.19747	0.15735
417.0742	86.5418	281.0041	13.8526	-0.0349	0.9994	0.0000	0.11872	0.12737	-0.18888	0.14989
420.8813	86.6748	283.1982	16.9382	-0.0349	0.9994	0.0000	0.11448	0.12132	-0.17954	0.14263
425.6238	86.8403	285.5614	20.4651	-0.0349	0.9994	0.0000	0.11062	0.11431	-0.16987	0.13503
431.5564	87.0476	287.7634	24.2256	-0.0349	0.9994	0.0000	0.10716	0.10617	-0.16005	0.12676
438.3911	87.3072	290.0595	27.7581</							

377.6770	84.0897	264.5025	12.4948	-0.1648	0.9863	-0.0022	-0.36258	-0.43111	-0.47357	-0.47970
383.4584	84.9291	264.8999	15.8195	-0.1250	0.9922	-0.0020	-0.38793	-0.52412	-0.43282	-0.57635
389.0767	85.4883	265.4726	15.3180	-0.0677	0.9977	0.0000	-0.39890	-0.63107	-0.44229	-0.67835
393.5693	85.7255	266.0119	13.6903	-0.0331	0.9995	0.0006	-0.42330	-0.58833	-0.37979	-0.71182
396.8929	85.8374	266.3977	11.1838	-0.0346	0.9994	0.0000	-0.42359	-0.38394	-0.31734	-0.62880
399.2100	85.9179	266.6228	8.3745	-0.0349	0.9994	0.0000	-0.42176	-0.27101	-0.30442	-0.47794
400.7655	85.9722	266.7545	5.7523	-0.0349	0.9994	0.0000	-0.42195	-0.24371	-0.28981	-0.31704
401.6912	86.0046	267.0051	2.9751	-0.0350	0.9994	0.0000	-0.42011	-0.27194	-0.28981	-0.31704
402.2691	86.0248	267.5516	2.6455	-0.0349	0.9994	0.0000	-0.41832	-0.21835	-0.27487	-0.30375
402.8155	86.0439	268.3894	2.6150	-0.0349	0.9994	0.0000	-0.41775	-0.21835	-0.26689	-0.28674
403.4021	86.0644	269.4962	2.7822	-0.0348	0.9994	0.0000	-0.41706	-0.19843	-0.25931	-0.27027
404.0843	86.0882	270.8234	3.1036	-0.0350	0.9994	0.0000	-0.41646	-0.18831	-0.25106	-0.25413
404.9052	86.1169	272.3173	3.5733	-0.0349	0.9994	0.0000	-0.41586	-0.17858	-0.24318	-0.23806
405.9016	86.1516	273.9305	4.1890	-0.0349	0.9994	0.0000	-0.41522	-0.16946	-0.23519	-0.22253
407.1088	86.1938	275.6314	4.9610	-0.0349	0.9994	0.0000	-0.41454	-0.16116	-0.22742	-0.20806
408.5655	86.2447	277.4076	5.9210	-0.0349	0.9994	0.0000	-0.41382	-0.15400	-0.21995	-0.19522
410.3173	86.3059	279.2313	7.0110	-0.0349	0.9994	0.0000	-0.41307	-0.14785	-0.21259	-0.18408
412.4210	86.3793	281.1097	8.3359	-0.0349	0.9994	0.0000	-0.41229	-0.14257	-0.20530	-0.17461
414.9470	86.4655	283.0301	9.9982	-0.0349	0.9994	0.0000	-0.41149	-0.13791	-0.19805	-0.16662
417.9874	86.5737	284.9848	11.7448	-0.0349	0.9994	0.0000	-0.41067	-0.13330	-0.19056	-0.15947
421.6710	86.7024	286.9684	13.9653	-0.0349	0.9994	0.0000	-0.40983	-0.12830	-0.18283	-0.15254
423.7948	86.8599	288.9742	16.6516	-0.0349	0.9994	0.0000	-0.40897	-0.12240	-0.17442	-0.14520
426.8145	87.0559	290.9840	19.8527	-0.0349	0.9994	0.0000	-0.40809	-0.11547	-0.16554	-0.13712
429.8509	87.3023	292.9726	23.4155	-0.0349	0.9994	0.0000	-0.40719	-0.10827	-0.15621	-0.12815
432.8959	87.6110	294.9018	26.7970	-0.0349	0.9994	0.0000	-0.40627	-0.10082	-0.14671	-0.11768
435.9403	87.9877	296.6883	29.3524	-0.0349	0.9994	0.0000	-0.40533	-0.09347	-0.14154	-0.10578
438.9859	88.4284	298.1993	30.8372	-0.0349	0.9994	0.0000	-0.40437	-0.08574	-0.14130	-0.09622
441.0313	88.9196	299.2946	31.4418	-0.0349	0.9994	0.0000	-0.40339	-0.08050	-0.14339	-0.08859
443.0767	89.4379	299.8802	31.4083	-0.0349	0.9994	0.0001	-0.40239	-0.08706	-0.14393	-0.08383
445.1221	89.9464	299.8416	29.6958	-0.0349	0.9994	0.0000	-0.40137	-0.09807	-0.14393	-0.08383
447.1675	90.3538	299.0334	18.6625	-0.0349	0.9994	0.0000	-0.40033	-0.10592	-0.14393	-0.08383
449.2129	90.7612	298.2252	20.2904	-0.0349	0.9994	0.0000	-0.39927	-0.11547	-0.14393	-0.08383
451.2583	91.1686	297.4170	22.4741	-0.0349	0.9994	0.0000	-0.39819	-0.12609	-0.14393	-0.08383
453.3037	91.5760	296.6088	24.7117	-0.0349	0.9994	0.0000	-0.39709	-0.13791	-0.14393	-0.08383
455.3491	91.9834	295.8006	27.0000	-0.0349	0.9994	0.0000	-0.39597	-0.15082	-0.14393	-0.08383
457.3945	92.3908	295.0000	29.3524	-0.0349	0.9994	0.0000	-0.39483	-0.16446	-0.14393	-0.08383
459.4399	92.7982	294.2000	31.7448	-0.0349	0.9994	0.0000	-0.39367	-0.17858	-0.14393	-0.08383
461.4853	93.2056	293.4000	34.1372	-0.0349	0.9994	0.0000	-0.39249	-0.19309	-0.14393	-0.08383
463.5307	93.6130	292.6000	36.5296	-0.0349	0.9994	0.0000	-0.39129	-0.20791	-0.14393	-0.08383
465.5761	94.0204	291.8000	38.9220	-0.0349	0.9994	0.0000	-0.39007	-0.22292	-0.14393	-0.08383
467.6215	94.4278	291.0000	41.3144	-0.0349	0.9994	0.0000	-0.38883	-0.23806	-0.14393	-0.08383
469.6669	94.8352	290.2000	43.7068	-0.0349	0.9994	0.0000	-0.38757	-0.25319	-0.14393	-0.08383
471.7123	95.2426	289.4000	46.0992	-0.0349	0.9994	0.0000	-0.38629	-0.26832	-0.14393	-0.08383
473.7577	95.6500	288.6000	48.4916	-0.0349	0.9994	0.0000	-0.38500	-0.28345	-0.14393	-0.08383
475.8031	96.0574	287.8000	50.8840	-0.0349	0.9994	0.0000	-0.38369	-0.29858	-0.14393	-0.08383
477.8485	96.4648	287.0000	53.2764	-0.0349	0.9994	0.0000	-0.38237	-0.31371	-0.14393	-0.08383
479.8939	96.8722	286.2000	55.6688	-0.0349	0.9994	0.0000	-0.38103	-0.32884	-0.14393	-0.08383
481.9393	97.2796	285.4000	58.0612	-0.0349	0.9994	0.0000	-0.37968	-0.34397	-0.14393	-0.08383
483.9847	97.6870	284.6000	60.4536	-0.0349	0.9994	0.0000	-0.37832	-0.35910	-0.14393	-0.08383
486.0301	98.0944	283.8000	62.8460	-0.0349	0.9994	0.0000	-0.37696	-0.37423	-0.14393	-0.08383
488.0755	98.5018	283.0000	65.2384	-0.0349	0.9994	0.0000	-0.37559	-0.38936	-0.14393	-0.08383
490.1209	98.9092	282.2000	67.6308	-0.0349	0.9994	0.0000	-0.37423	-0.40449	-0.14393	-0.08383
492.1663	99.3166	281.4000	70.0232	-0.0349	0.9994	0.0000	-0.37286	-0.41962	-0.14393	-0.08383
494.2117	99.7240	280.6000	72.4156	-0.0349	0.9994	0.0000	-0.37149	-0.43475	-0.14393	-0.08383
496.2571	100.1314	279.8000	74.8080	-0.0349	0.9994	0.0000	-0.37012	-0.44988	-0.14393	-0.08383
498.3025	100.5388	279.0000	77.2004	-0.0349	0.9994	0.0000	-0.36875	-0.46501	-0.14393	-0.08383
500.3479	100.9462	278.2000	79.5928	-0.0349	0.9994	0.0000	-0.36738	-0.48014	-0.14393	-0.08383
502.3933	101.3536	277.4000	81.9852	-0.0349	0.9994	0.0000	-0.36601	-0.49527	-0.14393	-0.08383
504.4387	101.7610	276.6000	84.3776	-0.0349	0.9994	0.0000	-0.36464	-0.51040	-0.14393	-0.08383
506.4841	102.1684	275.8000	86.7700	-0.0349	0.9994	0.0000	-0.36327	-0.52553	-0.14393	-0.08383
508.5295	102.5758	275.0000	89.1624	-0.0349	0.9994	0.0000	-0.36190	-0.54066	-0.14393	-0.08383
510.5749	102.9832	274.2000	91.5548	-0.0349	0.9994	0.0000	-0.36053	-0.55579	-0.14393	-0.08383
512.6203	103.3906	273.4000	93.9472	-0.0349	0.9994	0.0000	-0.35916	-0.57092	-0.14393	-0.08383
514.6657	103.7980	272.6000	96.3396	-0.0349	0.9994	0.0000	-0.35779	-0.58605	-0.14393	-0.08383
516.7111	104.2054	271.8000	98.7320	-0.0349	0.9994	0.0000	-0.35642	-0.60118	-0.14393	-0.08383
518.7565	104.6128	271.0000	101.1244	-0.0349	0.9994	0.0000	-0.35505	-0.61631	-0.14393	-0.08383
520.8019	105.0202	270.2000	103.5168	-0.0349	0.9994	0.0000	-0.35368	-0.63144	-0.14393	-0.08383
522.8473	105.4276	269.4000	105.9092	-0.0349	0.9994	0.0000	-0.35231	-0.64657	-0.14393	-0.08383
524.8927	105.8350	268.6000	108.3016	-0.0349	0.9994	0.0000	-0.35094	-0.66170	-0.14393	-0.08383
526.9381	106.2424	267.8000	110.6940	-0.0349	0.9994	0.0000	-0.34957	-0.67683	-0.14393	-0.08383
528.9835	106.6498	267.0000	113.0864	-0.0349	0.9994	0.0000	-0.34820	-0.69196	-0.14393	-0.08383
531.0289	107.0572	266.2000	115.4788	-0.0349	0.9994	0.0000	-0.34683	-0.70709	-0.14393	-0.08383
533.0743	107.4646	265.4000	117.8712	-0.0349	0.9994	0.0000	-0.34546	-0.72222	-0.14393	-0.08383
535.1197	107.8720	264.6000	120.2636	-0.0349	0.9994	0.0000	-0.34409	-0.73735	-0.14393	-0.08383
537.1651	108.2794	263.8000	122.6560	-0.0349	0.9994	0.0000	-0.34272	-0.75248	-0.14393	-0.08383
539.2105	108.6868	263.0000	125.0484	-0.0349	0.9994	0.0000	-0.34135	-0.76761	-0.14393	-0.08383
541.2559	109.0942	262.2000	127.4408	-0.0349	0.9994	0.0000	-0.34000	-0.78274	-0.14393	-0.08383
543.3013	109.5016	261.4000	129.8332	-0.0349	0.9994	0.0000	-0.33863	-0.79787	-0.14393	-0.08383
545.3467	109.9090	260.6000	132.2256	-0.0349	0.9994	0.0000	-0.33726	-0.81300	-0.14393	-0.08383
547.3921	110.3164	259.8000	134.6180	-0.0349	0.9994	0.0000	-0.33589	-0.82813	-0.14393	-0.08383
549.4375	110.7238	259.0000	137.0104	-0.0349	0.9994	0.0000	-0.33452	-0.84326	-0.14393	-0.08383
551.4829	111.1312	258.2000	139.4028	-0.0349	0.9994	0.0000	-0.33315	-0.85839	-0.14393	-0.08383
553.5283	111.5386	257.4000	141.7952	-0.0349	0.9994	0.0000	-0.33178	-0.87352	-0.14393	-0.08383
555.5737	111.9460	256.6000	144.1876	-0.0349	0.9994	0.0000	-0.33041	-0.88865	-0.14393	-0.08383
557.6191	112.3534	255.8000	146.5800	-0.0349	0.9994	0.0000	-0.32904	-0.90378	-0.14393	-0.08383
559.6645	112.7608	255.0000	148.9724	-0.0349	0.9994	0.0000	-0.32767	-0.91891	-0.14393	-0.08383
561.7099	113.1682	254.2000	151.3648	-0.0349	0.9994	0.0000	-0.32630	-0.93404	-0.14393	-0.08383
563.7553	113.5756	253.4000	153.7572	-0.0349	0.9994	0.0000	-0.32493	-0.94917	-0.14393	-0.08383
565.8007	113.9830	252.6000	156.1496	-0.0349	0.9994	0.0000	-0.32356	-0.96430	-0.14393	-0.08383
567.8461	114.3904	251.8000	158.5420	-0.0349	0.9994	0.0000	-0.32219	-0.97943	-0.14393	-0.08383
569.8915	114.7978	251.0000	160.9344	-0.034						

401.8430	86.0099	284.8721	4.7747	-0.0348	0.9994	0.0000	-0.17842	-0.22072	-0.25725	-0.35731
402.6134	86.0368	285.1928	5.0881	-0.0349	0.9994	0.0000	-0.17062	-0.21053	-0.24931	-0.31867
403.4548	86.0662	285.7930	5.3484	-0.0350	0.9994	0.0000	-0.16300	-0.19879	-0.24077	-0.29313
404.3754	86.0984	286.6256	5.6154	-0.0349	0.9994	0.0000	-0.15613	-0.18862	-0.23333	-0.27247
405.3890	86.1338	287.6244	5.9145	-0.0349	0.9994	0.0000	-0.14997	-0.18035	-0.22588	-0.25561
406.5112	86.1729	288.7270	6.2603	-0.0349	0.9994	0.0000	-0.14459	-0.17372	-0.21937	-0.24196
407.7584	86.2165	289.8857	6.6590	-0.0349	0.9994	0.0000	-0.13998	-0.16827	-0.21317	-0.23079
409.1499	86.2651	291.0704	7.1281	-0.0349	0.9994	0.0000	-0.13615	-0.16374	-0.20774	-0.22146
410.7086	86.3195	292.2654	7.6737	-0.0349	0.9994	0.0000	-0.13288	-0.15970	-0.20260	-0.21297
412.4645	86.3809	293.4654	8.3360	-0.0349	0.9994	0.0000	-0.13006	-0.15577	-0.19779	-0.20483
414.4592	86.4505	294.6721	9.1555	-0.0349	0.9994	0.0000	-0.12756	-0.15169	-0.19300	-0.19689
416.7503	86.5305	295.8888	10.1505	-0.0349	0.9994	0.0000	-0.12529	-0.14725	-0.18808	-0.18880
419.4229	86.6233	297.1175	11.5407	-0.0349	0.9994	0.0000	-0.12309	-0.14237	-0.18271	-0.18047
422.6084	86.7351	298.3542	13.3357	-0.0349	0.9994	0.0000	-0.12110	-0.13722	-0.17692	-0.17206
425.5000	86.8710	299.5832	15.6574	-0.0349	0.9994	0.0000	-0.11906	-0.13181	-0.17019	-0.16390
431.3790	87.0413	300.7614	18.5738	-0.0349	0.9994	0.0000	-0.11699	-0.12597	-0.16274	-0.15724
437.6231	87.2594	301.8650	21.9979	-0.0349	0.9994	0.0000	-0.11452	-0.11914	-0.15449	-0.15096
445.5853	87.5375	302.9150	25.3263	-0.0349	0.9994	0.0000	-0.11209	-0.11103	-0.14598	-0.14522
455.4134	87.8807	303.9026	27.8127	-0.0349	0.9994	0.0000	-0.11002	-0.10366	-0.13751	-0.13495
466.9681	88.2841	304.7698	29.0955	-0.0349	0.9994	0.0000	-0.11030	-0.09937	-0.13236	-0.12240
479.8416	88.7338	305.4486	29.2710	-0.0349	0.9994	0.0000	-0.11075	-0.08548	-0.12854	-0.10811
493.4023	89.2074	305.9075	28.5897	-0.0349	0.9994	0.0000	-0.11951	-0.08664	-0.12937	-0.10172
506.7681	89.6741	306.1462	27.1555	-0.0349	0.9994	0.0000	-0.13315	-0.09329	-0.15846	-0.09968
518.3573	90.0787	306.0228	22.3965	-0.0349	0.9994	0.0000	-0.16674	-0.11771	-0.10475	-0.11027
375.6508	83.9426	282.5457	17.2255	-0.0349	0.9752	-0.0191	-0.14669	-0.24713	-0.56236	-0.36876
378.9165	84.5457	281.7774	16.5077	-0.0349	0.9898	-0.0101	-0.29309	-0.37378	-0.37010	-0.45196
382.5759	84.9936	282.0323	15.9038	-0.0349	0.9949	-0.0123	-0.32456	-0.47988	-0.48923	-0.55140
387.2053	85.3814	283.5159	23.6447	-0.0689	0.9976	-0.0043	-0.32701	-0.50649	-0.41577	-0.57601
391.9248	85.6560	285.8144	18.2029	-0.0400	0.9992	-0.0006	-0.31838	-0.55343	-0.39768	-0.63467
395.3233	85.7838	287.8926	14.6130	-0.0337	0.9994	-0.0001	-0.25978	-0.50344	-0.33552	-0.65177
397.8106	85.8691	289.4548	11.4526	-0.0350	0.9994	0.0000	-0.22490	-0.37641	-0.31332	-0.63429
399.6617	85.9338	290.4652	9.1678	-0.0348	0.9994	0.0000	-0.21463	-0.30181	-0.29286	-0.59941
401.0715	85.9830	290.9408	7.1986	-0.0349	0.9994	0.0000	-0.20329	-0.28532	-0.27679	-0.53483
402.0475	86.0140	291.1199	4.3435	-0.0349	0.9994	0.0000	-0.19489	-0.27910	-0.26352	-0.47202
402.8255	86.0472	291.3785	4.7989	-0.0349	0.9994	0.0000	-0.18579	-0.26503	-0.25232	-0.41937
403.6859	86.0743	291.8649	5.1186	-0.0349	0.9994	0.0000	-0.17657	-0.24904	-0.24366	-0.39650
404.6210	86.1069	292.5320	5.3895	-0.0349	0.9994	0.0000	-0.16802	-0.23386	-0.22490	-0.36737
405.6338	86.1427	293.3218	5.6615	-0.0349	0.9994	0.0000	-0.16012	-0.20811	-0.21838	-0.31915
406.7346	86.1807	294.3262	5.9686	-0.0349	0.9994	0.0000	-0.15292	-0.19873	-0.21235	-0.29650
407.9380	86.2232	295.0926	6.2721	-0.0349	0.9994	0.0000	-0.14656	-0.18702	-0.20711	-0.27518
409.2434	86.2691	296.0240	6.5771	-0.0349	0.9994	0.0000	-0.14103	-0.17776	-0.20202	-0.25593
410.7378	86.3206	297.9742	7.3147	-0.0349	0.9994	0.0000	-0.13637	-0.16956	-0.19692	-0.23873
412.3978	86.3785	299.9448	8.0051	-0.0349	0.9994	0.0000	-0.12945	-0.16236	-0.19134	-0.22377
414.2859	86.4444	298.9416	8.8839	-0.0349	0.9994	0.0000	-0.12704	-0.15578	-0.18505	-0.21064
416.4661	86.5206	299.9675	10.0027	-0.0349	0.9994	0.0000	-0.12508	-0.14931	-0.17780	-0.19855
419.0285	86.6100	301.0194	11.4637	-0.0349	0.9994	0.0000	-0.12353	-0.14213	-0.16928	-0.18539
422.1113	86.7177	302.0835	13.3968	-0.0349	0.9994	0.0000	-0.12204	-0.13382	-0.15945	-0.17040
425.9093	86.8504	303.1294	15.8370	-0.0349	0.9994	0.0000	-0.12066	-0.12449	-0.14870	-0.15288
430.7009	87.0176	304.0892	18.8247	-0.0349	0.9994	0.0000	-0.11945	-0.11450	-0.13806	-0.13654
436.8526	87.2325	304.9332	22.2761	-0.0349	0.9994	0.0000	-0.11876	-0.10627	-0.13149	-0.12356
444.6847	87.5060	305.7109	25.5767	-0.0349	0.9994	0.0000	-0.11910	-0.10037	-0.12966	-0.11585
454.3155	87.8423	306.4414	28.0695	-0.0349	0.9994	0.0000	-0.12191	-0.09732	-0.13292	-0.11142
465.6054	88.2366	307.0892	29.4009	-0.0349	0.9994	0.0000	-0.12548	-0.09514	-0.13804	-0.10625
476.1623	88.6751	307.6079	29.5940	-0.0349	0.9994	0.0000	-0.13724	-0.10142	-0.14592	-0.10872
491.3845	89.1369	307.9770	28.8233	-0.0349	0.9994	0.0000	-0.15283	-0.13651	-0.13307	-0.11922
504.4695	89.5938	308.2251	27.2559	-0.0349	0.9994	0.0000	-0.18560	-0.17397	-0.14556	-0.10863
515.9195	89.9935	308.3160	23.1434	-0.0349	0.9994	0.0000	-0.25252	-0.26188	-0.39451	-0.49404
378.6060	84.4609	286.8519	15.9442	-0.0349	0.9817	-0.0252	-0.24701	-0.37397	-0.45566	-0.50863
381.5224	84.9206	286.1645	13.8058	-0.0349	0.9932	-0.0066	-0.32107	-0.50137	-0.55636	-0.61502
384.7188	85.2346	286.6092	11.7238	-0.0349	0.9970	-0.0104	-0.32480	-0.52059	-0.46155	-0.61502
388.0428	85.5993	288.4181	10.8177	-0.0349	0.9986	-0.0036	-0.30304	-0.48923	-0.43568	-0.58744
393.0424	85.7001	291.0376	14.9729	-0.0378	0.9993	0.0004	-0.26259	-0.41631	-0.37214	-0.63823
396.0241	85.8077	293.2645	11.7904	-0.0341	0.9994	0.0001	-0.24357	-0.37930	-0.34860	-0.61202
398.2182	85.8833	294.9059	9.2132	-0.0350	0.9994	0.0000	-0.23511	-0.36286	-0.32841	-0.58076
399.8861	85.9416	295.9733	7.4329	-0.0348	0.9994	0.0000	-0.22538	-0.35277	-0.30975	-0.55795
401.1944	85.9872	296.5047	5.9741	-0.0349	0.9994	0.0000	-0.21869	-0.34005	-0.29340	-0.54165
402.1253	86.0197	296.7093	3.7083	-0.0350	0.9994	0.0000	-0.21117	-0.32547	-0.27856	-0.52140
402.8753	86.0460	296.9389	4.1510	-0.0349	0.9994	0.0000	-0.20275	-0.31023	-0.26676	-0.49780
403.6976	86.0747	297.3442	4.4692	-0.0348	0.9994	0.0000	-0.19430	-0.29524	-0.25588	-0.47364
404.5806	86.1055	297.8808	4.7412	-0.0349	0.9994	0.0000	-0.18590	-0.27979	-0.24697	-0.44812
405.5261	86.1385	298.5031	5.0170	-0.0349	0.9994	0.0000	-0.17741	-0.26366	-0.23876	-0.42005
406.5452	86.1741	299.1789	5.3347	-0.0349	0.9994	0.0000	-0.16919	-0.24660	-0.22166	-0.38981
407.6545	86.2129	299.8896	5.7155	-0.0349	0.9994	0.0000	-0.16106	-0.22896	-0.20500	-0.35817
408.8782	86.2556	300.6293	6.2083	-0.0349	0.9994	0.0000	-0.15332	-0.21217	-0.21904	-0.32535
410.2462	86.3034	301.3997	6.8191	-0.0349	0.9994	0.0000	-0.14623	-0.19680	-0.21305	-0.29479
411.7975	86.3575	302.2071	7.6131	-0.0349	0.9994	0.0000	-0.13995	-0.18385	-0.20734	-0.26742
413.5843	86.4199	303.0593	8.6267	-0.0349	0.9994	0.0000	-0.13486	-0.17322	-0.20063	-0.24520
415.6733	86.4929	303.9575	9.9012	-0.0349	0.9994	0.0000	-0.13082	-0.16543	-0.19345	-0.22907
418.1598	86.5797	304.8921	11.5528	-0.0349	0.9994	0.0000	-0.12809	-0.15807	-0.18488	-0.21598
421.1924	86.6856	305.8381	13.7291	-0.0349	0.9994	0.0000	-0.12571	-0.15138	-0.17716	-0.20592
424.9686	86.8175	306.7483	16.3941	-0.0349	0.9994	0.0000	-0.12318	-0.14546	-0.17186	-0.19692
429.7618	86.9848	307.5202	19.5421	-0.0348	0.9994	0.0000	-0.12032	-0.13946	-0.16680	-0.18942
435.9188	87.1938	308.1167	23.0933	-0.0349	0.9994	0.0000	-0.11580	-0.13341	-0.16169	-0.18495
443.7100	87.4719	308.6300	26.4140	-0.0349	0.9994	0.0000	-0.11341	-0.12703	-0.15680	-0.17977
453.2882	87.8037	309.1111	28.9863	-0.0349	0.9994	0.0000	-0.11374	-0.12069	-0.15176	-0.17306
464.2882	88.1905	309.5431	30.4696	-0.0349	0.9994	0.0000	-0.11309	-0.11475	-0.14598	-0.16647
476.5780	88.6198	309.8979	30.7875	-0.0349	0.9994	0.0000	-0.11075	-0.10858	-0.14222	-0.16119
489.5138	89.0716	310.1622	30.0206	-0.0349	0.9994	0.0000	-0.10937	-0.10296	-0.13877	-0.15684
502.3777	89.5208	310.3740	28.2416	-0.0349	0.9994	0.0000	-0.10791	-0.10099	-0.13577	-0.15384
513.5960	89.9124	310.6270	23.5306	-0.0349	0.9994	0.0000	-0.10642	-0.09808	-0.13286	-0.15108
381.8565	84.9105	291.0110	14.0480	-0.0349	0.9877	-0.0284	-0.32725	-0.50980	-0.72183	-0.66841
384.3531	85.2310	290.5580	10.8134	-0.0900	0.9959	-0.0015	-0.21093	-0.38172		



407.9177	86.2221	304.9076	5.6929	-0.0349	0.9994	0.0000	-0.18817	-0.31903	-0.27344	-0.50420
409.1870	86.2664	305.5649	6.3924	-0.0349	0.9994	0.0000	-0.18017	-0.30066	-0.25563	-0.48121
410.6807	86.3175	306.2754	7.3136	-0.0349	0.9994	0.0000	-0.17156	-0.27833	-0.23718	-0.45275
412.3669	86.3774	307.0488	8.4884	-0.0349	0.9994	0.0000	-0.16268	-0.25303	-0.21851	-0.41684
414.4063	86.4487	307.8841	9.9490	-0.0349	0.9994	0.0000	-0.15417	-0.22495	-0.19984	-0.37353
416.8717	86.5347	308.7653	11.8421	-0.0349	0.9994	0.0000	-0.14650	-0.19649	-0.18146	-0.32343
419.9268	86.6414	309.6544	14.3504	-0.0349	0.9994	0.0000	-0.14087	-0.16938	-0.16268	-0.26510
423.7720	86.7757	310.4857	17.3487	-0.0349	0.9994	0.0000	-0.13749	-0.14936	-0.14560	-0.21115
428.6655	86.9466	311.1081	20.7633	-0.0349	0.9994	0.0000	-0.13670	-0.13658	-0.13125	-0.17281
434.9187	87.1649	311.4752	24.5590	-0.0349	0.9994	0.0000	-0.13636	-0.12844	-0.12204	-0.15397
442.7391	87.4381	311.7400	28.1045	-0.0349	0.9994	0.0000	-0.13543	-0.12238	-0.11980	-0.14308
452.1689	87.7673	311.9893	31.0166	-0.0349	0.9994	0.0000	-0.13602	-0.11694	-0.12272	-0.13597
463.0870	88.1486	312.2180	32.9226	-0.0349	0.9994	0.0000	-0.13976	-0.11377	-0.12897	-0.12598
475.1629	88.5703	312.4127	33.5908	-0.0349	0.9994	0.0000	-0.14396	-0.11112	-0.13649	-0.12598
487.8688	89.0141	312.5654	32.9708	-0.0349	0.9994	0.0000	-0.15413	-0.11532	-0.14255	-0.12596
500.5635	89.4573	312.7027	30.9953	-0.0349	0.9994	0.0000	-0.16775	-0.12293	-0.16859	-0.12795
511.4259	89.8366	313.0118	23.4662	-0.0349	0.9994	0.0000	-0.21061	-0.15125	-0.13938	-0.14349
385.2148	85.2499	295.5185	8.5807	-0.0349	0.9994	0.0288	-0.31619	-0.61363	-0.74241	-0.76623
387.0143	85.4250	295.9680	9.6244	-0.0349	0.9994	0.0106	-0.20494	-0.43686	-0.51675	-0.56487
388.8358	85.5355	297.0030	10.1765	-0.0349	0.9994	0.0016	-0.33963	-0.60033	-0.74085	-0.73603
391.3987	85.6412	298.9865	12.5371	-0.0349	0.9994	-0.0012	-0.26359	-0.54081	-0.58897	-0.69900
394.2754	85.7454	301.3495	13.9872	-0.0349	0.9994	-0.0001	-0.25693	-0.51821	-0.61026	-0.69160
396.4081	85.8202	303.0471	9.0412	-0.0349	0.9994	0.0000	-0.23927	-0.48608	-0.55661	-0.68343
398.0108	85.8761	304.2322	6.4805	-0.0349	0.9994	0.0000	-0.23664	-0.47151	-0.56438	-0.67790
399.2262	85.9185	305.0426	4.7884	-0.0349	0.9994	0.0000	-0.23017	-0.46292	-0.53788	-0.67022
400.1549	85.9509	305.5621	3.6355	-0.0349	0.9994	0.0000	-0.22882	-0.45472	-0.53591	-0.66141
401.8483	85.9752	305.8838	2.6824	-0.0349	0.9994	0.0000	-0.22659	-0.45044	-0.51920	-0.65733
402.4484	85.9961	306.1865	3.0096	-0.0349	0.9994	0.0000	-0.22810	-0.45287	-0.51890	-0.66439
402.0923	86.0186	306.5381	3.2988	-0.0349	0.9994	0.0000	-0.22667	-0.45121	-0.50833	-0.66372
402.7876	86.0429	306.9326	3.5912	-0.0349	0.9994	0.0000	-0.22615	-0.44998	-0.50449	-0.66298
403.5467	86.0694	307.3634	3.9153	-0.0349	0.9994	0.0000	-0.22381	-0.44581	-0.49472	-0.65986
404.3855	86.0987	307.8296	4.3040	-0.0349	0.9994	0.0000	-0.22110	-0.43990	-0.48723	-0.65408
405.3235	86.1315	308.3338	4.7703	-0.0349	0.9994	0.0000	-0.21705	-0.43152	-0.47575	-0.64696
406.3900	86.1687	308.8842	5.4024	-0.0349	0.9994	0.0000	-0.21220	-0.42103	-0.46468	-0.63825
407.6204	86.2117	309.4906	6.1696	-0.0349	0.9994	0.0000	-0.20609	-0.40790	-0.44968	-0.62806
409.0616	86.2620	310.1650	7.1978	-0.0349	0.9994	0.0000	-0.19911	-0.39225	-0.43402	-0.61506
410.7794	86.3220	310.9204	8.5164	-0.0349	0.9994	0.0000	-0.19082	-0.37316	-0.41325	-0.59749
412.8518	86.3944	311.7547	10.1444	-0.0349	0.9994	0.0000	-0.18132	-0.34918	-0.38919	-0.57097
415.3929	86.4831	312.6460	12.2762	-0.0349	0.9994	0.0000	-0.16993	-0.31863	-0.35682	-0.53149
418.5824	86.5944	313.5406	15.1145	-0.0349	0.9994	0.0000	-0.15681	-0.27968	-0.31744	-0.47115
422.6208	86.7355	314.5885	18.5184	-0.0349	0.9994	0.0000	-0.14272	-0.23530	-0.26739	-0.39357
427.7240	86.9137	315.8885	22.3591	-0.0349	0.9994	0.0000	-0.13160	-0.18722	-0.21194	-0.30240
434.1312	87.1375	317.5446	26.7434	-0.0349	0.9994	0.0000	-0.12343	-0.14734	-0.15852	-0.22921
442.0072	87.4125	319.5146	31.1679	-0.0349	0.9994	0.0000	-0.11931	-0.12192	-0.12611	-0.18608
451.3993	87.7405	321.5245	35.2051	-0.0349	0.9994	0.0000	-0.11822	-0.10512	-0.10789	-0.15627
462.2095	88.1180	323.5905	38.2765	-0.0349	0.9994	0.0000	-0.12026	-0.09473	-0.09731	-0.13307
474.1382	88.5345	325.7489	39.8753	-0.0349	0.9994	0.0000	-0.12111	-0.08548	-0.09026	-0.11163
486.6853	88.9727	327.9370	39.6845	-0.0349	0.9994	0.0000	-0.12955	-0.08574	-0.08594	-0.10012
499.2406	89.4111	331.4431	37.5994	-0.0349	0.9994	0.0000	-0.14388	-0.09249	-0.11573	-0.09704
509.4989	89.7694	335.5941	22.5632	-0.0349	0.9994	0.0000	-0.20774	-0.13478	-0.04790	-0.11200

plate top middle

X	Y	Z	AREA	EX	EY	EZ	CP1	CP2	CP3	CP4
405.3226	86.1315	256.6226	0.0673	-0.0350	0.9994	0.0000	-0.17610	-0.20100	-0.29206	-0.24007
405.4666	86.1365	256.8381	0.2452	-0.0352	0.9994	0.0000	-0.17260	-0.20386	-0.28334	-0.24986
405.6702	86.1437	256.9938	0.4183	-0.0354	0.9994	0.0001	-0.16949	-0.20415	-0.27920	-0.25278
405.9571	86.1537	256.0916	0.6557	-0.0354	0.9994	0.0002	-0.16728	-0.20331	-0.27800	-0.25160
406.3498	86.1675	255.1275	0.9521	-0.0353	0.9994	0.0001	-0.16504	-0.20194	-0.27672	-0.24897
406.8607	86.1853	252.0926	1.3240	-0.0352	0.9994	0.0002	-0.16258	-0.19991	-0.27586	-0.24501
407.5187	86.2083	250.9866	1.7937	-0.0352	0.9994	0.0002	-0.15983	-0.19698	-0.27493	-0.23951
408.3685	86.2380	249.7983	2.4386	-0.0352	0.9994	0.0002	-0.15655	-0.19283	-0.27379	-0.23222
409.4488	86.2758	248.5099	3.2743	-0.0351	0.9994	0.0002	-0.15277	-0.18765	-0.27252	-0.22349
410.8227	86.3238	247.1126	4.4444	-0.0351	0.9994	0.0002	-0.14837	-0.18118	-0.27084	-0.21312
412.5809	86.3852	245.5851	6.0869	-0.0350	0.9994	0.0002	-0.14323	-0.17336	-0.26881	-0.20120
414.8376	86.4640	243.9096	8.4081	-0.0350	0.9994	0.0002	-0.13720	-0.16401	-0.26610	-0.18773
417.7434	86.5654	242.0702	11.7110	-0.0350	0.9994	0.0002	-0.13024	-0.15314	-0.26267	-0.17310
421.4933	86.6963	240.0563	16.4138	-0.0350	0.9994	0.0001	-0.12204	-0.14059	-0.25805	-0.15756
426.3295	86.8652	237.8755	22.9986	-0.0349	0.9994	0.0001	-0.11255	-0.12634	-0.25220	-0.14154
432.5228	87.0815	235.5584	31.9279	-0.0349	0.9994	0.0001	-0.10177	-0.11066	-0.24465	-0.12541
440.3501	87.3548	233.1766	43.4965	-0.0349	0.9994	0.0001	-0.09047	-0.09464	-0.23718	-0.10977
450.0399	87.6931	230.8453	57.4448	-0.0349	0.9994	0.0001	-0.08024	-0.08039	-0.23145	-0.09576
461.6959	88.1001	228.7302	72.6354	-0.0349	0.9994	0.0000	-0.07195	-0.06866	-0.23037	-0.08248
475.2090	88.5720	227.0286	86.8159	-0.0349	0.9994	0.0000	-0.06614	-0.05906	-0.23495	-0.06937
490.1963	89.0958	225.9299	97.0728	-0.0350	0.9994	0.0000	-0.06163	-0.05024	-0.24111	-0.05573
506.0024	89.6478	225.5831	100.6889	-0.0348	0.9994	0.0000	-0.06590	-0.04888	-0.25232	-0.05034
521.8241	90.1998	226.0465	99.9680	-0.0349	0.9994	0.0000	-0.07812	-0.05343	-0.28506	-0.04936
534.4461	90.6406	226.3516	58.0071	-0.0349	0.9994	0.0000	-0.13388	-0.10273	-0.31196	-0.08827
405.3966	86.1341	226.6768	0.0617	-0.0357	0.9994	0.0002	-0.17387	-0.20274	-0.27989	-0.24594
405.6893	86.1444	226.0072	0.2081	-0.0357	0.9994	0.0001	-0.16934	-0.20217	-0.27211	-0.24071
406.4723	86.1569	225.2830	0.3923	-0.0355	0.9994	0.0000	-0.16384	-0.19949	-0.27051	-0.23828
406.7771	86.1721	224.5386	0.6292	-0.0353	0.9994	0.0001	-0.16047	-0.19687	-0.26900	-0.23618
407.0016	86.1908	223.7400	0.9048	-0.0353	0.9994	0.0002	-0.15752	-0.19015	-0.26678	-0.23218
407.8424	86.2130	222.8922	1.2610	-0.0353	0.9994	0.0002	-0.15447	-0.18611	-0.26579	-0.22593
408.4175	86.2402	221.9944	1.7146	-0.0352	0.9994	0.0002	-0.15098	-0.18114	-0.26464	-0.21696
409.3712	86.2726	221.0377	2.3480	-0.0351	0.9994	0.0002	-0.14710	-0.17540	-0.26326	-0.20764
410.5444	86.3146	220.0057	3.1598	-0.0351	0.9994	0.0002	-0.14279	-0.16875	-0.26151	-0.19726
411.9960	86.3653	218.8924	4.3025	-0.0351	0.9994	0.0002	-0.13791	-0.16110	-0.25937	-0.18555
413.8160	86.4288	217.6797	5.9087	-0.0350	0.9994	0.0002	-0.13231	-0.15231	-0.25646	-0.17342
416.1173	86.5092	216.3521	8.1801	-0.0349	0.9994	0.0002	-0.12593	-0.14236	-0.25279	-0.16032
419.0483	86.6115	214.8960	11.4145	-0.0349	0.9994	0.0001	-0.11857	-0.13122	-0.24798	-0.14683
422.8006	86.7425	213.3026	16.0152	-0.0349	0.9994	0.0001	-0.11022	-0.11894	-0.24217	-0.13335
427.6116	86.9104	211.5780	22.4636	-0.0349	0.9994	0.0001	-0.10094	-0.10579	-0.23510	-0.12016
433.7472	87.1246	209.7457	31.2085	-0.0349	0.9994	0.0001	-0.09132	-0.09255	-0.22829	-0.10751
441.4781	87.3945	207.8625	42.5505	-0.0349	0.9994	0.0000	-0.08264	-0.08073	-0.22286	-0.09592
451.0276	87.7279	206.0195	56.2382	-0.0349	0.9994	0.0000	-0.07536	-0.07055	-0.22070	-0.08415
462.4952	88.1282	204.3484	71.1714	-0.0349	0.9994	0.0000	-0.07050	-0.06201	-0.22393	-0.07221
475.7737	88.5919	203.0052	85.1400	-0.0349	0.9994	0.0000	-0.06629	-0.05334	-0.22931	-0.05897
490.4893	89.1060	202.1379	95.2637	-0.0349	0.9994	0.0000	-0.07215	-0.05313	-0.24326	-0.05424
506.0052	89.6478	201.8648	98.8480	-0.0349	0.9994	0.0000	-0.08172	-0.05516	-0.26879	-0.05169
521.5672	90.1909	202.2335	95.4925	-0.0349	0.9994	0.0000	-0.14192	-0.10711	-0.29291	-0.09130
534.2612	90.6341	202.9587	60.1690	-0.0349	0.9994	0.0000	-0.13743	-0.10751	-0.28393	-0.08655
405.4551	86.1362	202.7557	0.0573	-0.0356	0.9994	0.0001	-0.17243	-0.19981	-0.28348	-0.24280
405.8654	86.1507	202.0866	0.3523	-0.0354	0.9994	0.0001	-0.16762	-0.19323	-0.26913	-0.23945
406.3633	86.1672	201.3379	0.6292	-0.0354	0.9994	0.0001	-0.15949	-0.18929	-0.26655	-0.23316
406.8738	86.1863	200.5349	0.9048	-0.0353	0.9994	0.0002	-0.15629	-0.18534	-0.26420	-0.22697
407.5070	86.2086	200.5349	1.2610	-0.0353	0.9994	0.0003	-0.15306	-0.18101	-0.26229	-0.22002
408.2466	86.2346	200.5349	1.7146	-0.0352	0.9994	0.0002	-0.14980	-0.17638	-0.26037	-0.21246
409.1122	86.2650	200.5349	2.3480	-0.0352	0.9994	0.0003	-0.14626	-0.17111	-0.25844	-0.20403
410.1471	86.3012	200.5349	3.1598	-0.0351	0.9994	0.0003	-0.14245	-0.16532	-0.25636	-0.19488
411.3936	86.3448	200.5349	4.1149	-0.0350	0.9994	0.0002	-0.13826	-0.15884	-0.25393	-0.18497
412.9083	86.3978	200.5349	5.6827	-0.0350	0.9994	0.0002	-0.13362	-0.15162	-0.25118	-0.17433
414.7802	86.4631	200.5349	7.9091	-0.0350	0.9994	0.0002	-0.12831	-0.14347	-0.24762	-0.16296
417.1206	86.5448	200.5349	11.0929	-0.0349	0.9994	0.0002	-0.12236	-0.13447	-0.24344	-0.15121
420.0753	86.6479	200.5349	15.6316	-0.0349	0.9994	0.0001	-0.11553	-0.12449	-0.23805	-0.13928
423.8329	86.7790	200.5349	22.0090	-0.0349	0.9994	0.0001	-0.10780	-0.11359	-0.23167	-0.12747
428.6264	86.9462	200.5349	30.6691	-0.0349	0.9994	0.0001	-0.09929	-0.10197	-0.22411	-0.11604
434.7179	87.1588	200.5349	41.9075	-0.0349	0.9994	0.0000	-0.09042	-0.09008	-0.21653	-0.10487
442.3738	87.4260	200.5349	55.4584	-0.0349	0.9994	0.0000	-0.08233	-0.07906	-0.21017	-0.09420
451.8139	87.7555	200.5349	70.2095	-0.0349	0.9994	0.0000	-0.07534	-0.06898	-0.20646	-0.08282
463.1360	88.1508	200.5349	83.9694	-0.0349	0.9994	0.0000	-0.07096	-0.06056	-0.20807	-0.07143
476.2342	88.6082	200.5349	99.661	-0.0349	0.9994	0.0000	-0.06704	-0.05190	-0.21223	-0.05861
490.7407	89.1148	200.5349	127.3264	-0.0349	0.9994	0.0000	-0.07397	-0.05260	-0.21710	-0.04567
506.0405	89.6490	200.5349	164.993	-0.0349	0.9994	0.0000	-0.08445	-0.05132	-0.22738	-0.03276
521.4061	90.1833	200.5349	214.485	-0.0349	0.9994	0.0000	-0.14485	-0.10512	-0.25710	-0.08907
534.1352	90.6297	200.5349	0.0516	-0.0352	0.9994	0.0003	-0.17131	-0.19593	-0.27633	-0.23539
405.5012	86.1378	200.5349	0.1732	-0.0353	0.9994	0.0001	-0.16496	-0.19373	-0.26712	-0.23960
406.0033	86.1556	200.5349	0.3245	-0.0355	0.9994	0.0002	-0.15997	-0.18854	-0.26355	-0.23401
406.5608	86.1753	200.5349	0.5158	-0.0355	0.9994	0.0002	-0.15651	-0.18354	-0.26085	-0.22607
407.1866	86.1975	200.5349	0.7635	-0.0353	0.9994	0.0002	-0.15304	-0.17882	-0.25829	-0.21882
407.8996	86.2227	200.5349	1.0734	-0.0352	0.9994	0.0002	-0.14957	-0.17382	-0.25611	-0.21102
408.7145	86.2514	200.5349	1.4745	-0.0352	0.9994	0.0002	-0.14612	-0.16866	-0.25385	-0.20282
409.6497	86.2842	200.5349	2.0441	-0.0351	0.9994	0.0002	-0.14254	-0.16317	-0.25163	-0.19418
410.7474	86.3227	200.5349	2.7871	-0.0350	0.9994	0.0002	-0.13874	-0.15730	-0.24920	-0.18504
412.0509	86.3683	200.5349	3.8448	-0.0350	0.9994	0.0002	-0.13467	-0.15098	-0.24647	-0.17545
413.6158	86.4230	200.5349	5.3501	-0.0349	0.9994	0.0002	-0.13025	-0.14416	-0.24343	-0.16543
415.5297	86.4899	200.5349	7.5025	-0.0349	0.9994	0.0002	-0.12526	-0.13663	-0.23960	-0.15495
417.9022	86.5726	200.5349	10.5987	-0.0349	0.9994	0.0001	-0.11970	-0.12845	-0.23511	-0.14433
420.8770	86.6764	200.5349	15.0346	-0.0349	0.9994	0.0001	-0.11340	-0.11952	-0.22952	-0.13374
424.6399	86.8076	200.5349	21.2994	-0.0349	0.9994	0.0001	-0.10633	-0.10983	-0.22300	-0.12341
429.4201	86.9743	200.5349	29.8480	-0.0349	0.9994	0.0001	-0.09866	-0.09957	-0.21554	-0.11356
435.4765	87.1856	200.5349	40.9873	-0.0349	0.9994	0.0001	-0.09070	-0.08893	-0.20802	-0.10380
443.0729	87.4506	200.5349	54.4629	-0.0349	0.9994	0.0000	-0.08347	-0.07886	-0.20183	-0.09417
452.4373	87.7771	200.5349	72.7716	-0.0349	0.9994	0.0000	-0.07716	-0.07334	-0.19777	-0.08347
463.6837	88.1684	200.5349	97							



409.0180	86.2622	255.9647	0.9952	-0.0352	0.9994	-0.0002	-0.14712	-0.16873	-0.25156	-0.20460
409.9984	86.2967	255.7387	1.3758	-0.0352	0.9994	-0.0002	-0.14351	-0.16317	-0.24873	-0.19601
411.1370	86.3367	255.4979	1.9182	-0.0350	0.9994	-0.0002	-0.13990	-0.15750	-0.24604	-0.18726
412.4778	86.3836	255.2385	2.6333	-0.0350	0.9994	-0.0002	-0.13609	-0.15156	-0.24300	-0.17815
414.0763	86.4396	254.9595	3.6560	-0.0350	0.9994	-0.0002	-0.13215	-0.14541	-0.24000	-0.16933
416.0186	86.5074	254.6565	5.1176	-0.0349	0.9994	-0.0001	-0.12787	-0.13884	-0.23649	-0.15983
418.4132	86.5909	254.3256	7.2174	-0.0349	0.9994	-0.0001	-0.12312	-0.13187	-0.23231	-0.14958
421.4023	86.6951	253.9614	10.2516	-0.0349	0.9994	-0.0001	-0.11790	-0.12436	-0.22748	-0.13986
425.1696	86.8264	253.5631	14.6173	-0.0348	0.9994	-0.0001	-0.11206	-0.11631	-0.22164	-0.13036
429.9418	86.9928	253.1334	20.8040	-0.0348	0.9994	-0.0001	-0.10549	-0.10757	-0.21482	-0.12117
435.9754	87.2033	252.6766	29.2771	-0.0349	0.9994	-0.0000	-0.09846	-0.09832	-0.20722	-0.11249
443.5326	87.4669	252.2072	40.3514	-0.0349	0.9994	-0.0000	-0.09113	-0.08850	-0.19946	-0.10363
452.8309	87.7913	251.7469	53.7846	-0.0349	0.9994	-0.0000	-0.08447	-0.07897	-0.19311	-0.09455
463.9688	88.1801	251.3299	68.4836	-0.0349	0.9994	-0.0000	-0.07858	-0.06963	-0.18864	-0.08410
476.8465	88.6297	250.9985	83.2507	-0.0349	0.9994	-0.0000	-0.07551	-0.06198	-0.18950	-0.07374
491.1096	89.1277	250.7798	99.2670	-0.0349	0.9994	-0.0000	-0.07251	-0.05397	-0.19242	-0.06195
506.1695	89.5535	250.7132	116.9839	-0.0349	0.9994	-0.0000	-0.07954	-0.05494	-0.20985	-0.05709
521.3112	90.1821	250.8086	136.9359	-0.0349	0.9994	-0.0000	-0.09005	-0.05865	-0.23240	-0.05487
534.0330	90.6262	250.9896	159.8406	-0.0349	0.9994	-0.0000	-0.13491	-0.08998	-0.24710	-0.06971
405.5421	86.1393	256.0003	0.0455	-0.0355	0.9994	-0.0000	-0.17010	-0.19390	-0.27359	-0.23192
406.1252	86.1500	256.0008	0.1525	-0.0355	0.9994	-0.0000	-0.16269	-0.18985	-0.26354	-0.23433
406.7615	86.1825	256.0004	0.2861	-0.0354	0.9994	-0.0000	-0.15710	-0.18296	-0.25887	-0.22660
407.4618	86.2074	256.0001	0.4572	-0.0354	0.9994	-0.0000	-0.15318	-0.17670	-0.25506	-0.21716
408.2442	86.2350	256.9999	0.6809	-0.0353	0.9994	-0.0000	-0.14931	-0.17097	-0.25144	-0.20887
409.1243	86.2661	256.9999	0.9649	-0.0352	0.9994	-0.0000	-0.14559	-0.16517	-0.24822	-0.20026
410.1203	86.3011	256.9994	1.3374	-0.0352	0.9994	-0.0000	-0.14193	-0.15941	-0.24499	-0.19154
411.2731	86.3416	256.9985	1.8697	-0.0350	0.9994	-0.0000	-0.13832	-0.15368	-0.24187	-0.18280
412.6273	86.3890	256.9976	2.5748	-0.0350	0.9994	-0.0000	-0.13452	-0.14775	-0.23847	-0.17378
414.2380	86.4454	256.9972	3.5846	-0.0349	0.9994	-0.0000	-0.13069	-0.14179	-0.23505	-0.16480
416.1908	86.5135	256.9976	5.0298	-0.0349	0.9994	-0.0000	-0.12650	-0.13551	-0.23113	-0.15560
418.5933	86.5974	256.9988	7.1080	-0.0349	0.9994	-0.0000	-0.12198	-0.12894	-0.22698	-0.14633
421.5874	86.7017	256.9982	10.1195	-0.0348	0.9994	-0.0000	-0.11703	-0.12203	-0.22153	-0.13738
425.3568	86.8331	256.9985	14.4607	-0.0348	0.9994	-0.0000	-0.11151	-0.11464	-0.21545	-0.12869
430.1265	86.9994	256.9989	20.6167	-0.0348	0.9994	-0.0000	-0.10556	-0.10685	-0.20841	-0.12038
436.1521	87.2095	256.9989	29.0622	-0.0349	0.9994	-0.0000	-0.09885	-0.09812	-0.20072	-0.11254
443.6952	87.4726	256.9989	40.1124	-0.0349	0.9994	-0.0000	-0.09207	-0.08888	-0.19283	-0.10434
452.9735	87.7964	256.9973	53.3336	-0.0349	0.9994	-0.0000	-0.08599	-0.07973	-0.18644	-0.09570
464.0864	88.1842	256.9958	68.5335	-0.0349	0.9994	-0.0000	-0.08068	-0.07061	-0.18182	-0.08555
476.9347	88.6328	256.9936	83.2507	-0.0349	0.9994	-0.0000	-0.07578	-0.06323	-0.18275	-0.07559
491.1667	89.1284	256.9933	99.2670	-0.0349	0.9994	-0.0000	-0.07119	-0.05575	-0.18544	-0.06441
506.1961	89.5544	256.9933	116.9839	-0.0349	0.9994	-0.0000	-0.08206	-0.05602	-0.20287	-0.05836
521.3067	90.1819	256.9933	136.9359	-0.0349	0.9994	-0.0000	-0.09212	-0.05961	-0.22370	-0.05527
534.0232	90.6258	256.9933	159.8406	-0.0349	0.9994	-0.0000	-0.12167	-0.07357	-0.23328	-0.04797
405.5314	86.1389	257.0015	0.3548	-0.0355	0.9994	-0.0005	-0.16977	-0.19338	-0.27136	-0.23206
406.0934	86.1588	257.2512	0.1583	-0.0356	0.9994	-0.0004	-0.16246	-0.18920	-0.26103	-0.23441
406.7092	86.1807	257.4308	0.2968	-0.0355	0.9994	-0.0001	-0.15686	-0.18214	-0.25605	-0.21728
407.3902	86.2048	257.6205	0.4735	-0.0354	0.9994	-0.0001	-0.15287	-0.17569	-0.25209	-0.21264
408.1545	86.2318	257.8212	0.7036	-0.0353	0.9994	-0.0001	-0.14891	-0.16963	-0.24783	-0.20836
409.0174	86.2622	258.0348	0.9943	-0.0352	0.9994	-0.0002	-0.14512	-0.16369	-0.24478	-0.19979
409.9974	86.2967	258.2598	1.3742	-0.0352	0.9994	-0.0002	-0.14143	-0.15774	-0.24179	-0.19083
411.1358	86.3367	258.4987	1.9169	-0.0350	0.9994	-0.0002	-0.13779	-0.15183	-0.23790	-0.18190
412.4770	86.3836	258.7563	2.6327	-0.0350	0.9994	-0.0002	-0.13401	-0.14519	-0.23423	-0.17275
414.0762	86.4396	259.0345	3.6561	-0.0349	0.9994	-0.0002	-0.13019	-0.14010	-0.23053	-0.16370
416.0191	86.5074	259.3385	5.1177	-0.0349	0.9994	-0.0001	-0.12609	-0.13401	-0.22630	-0.15457
418.4133	86.5909	259.6717	7.2178	-0.0349	0.9994	-0.0001	-0.12170	-0.12777	-0.22156	-0.14560
421.4019	86.6951	260.0346	10.2517	-0.0348	0.9994	-0.0001	-0.11693	-0.12126	-0.21613	-0.13690
425.1699	86.8265	260.4317	14.6184	-0.0348	0.9994	-0.0001	-0.11164	-0.11437	-0.20977	-0.12866
429.9425	86.9929	260.8634	20.8002	-0.0348	0.9994	-0.0001	-0.10582	-0.10692	-0.20243	-0.12091
435.9759	87.2033	261.3209	29.2722	-0.0349	0.9994	-0.0000	-0.09971	-0.09888	-0.19451	-0.11360
443.5326	87.4669	261.7905	40.3431	-0.0349	0.9994	-0.0000	-0.09335	-0.08997	-0.18632	-0.10581
452.8327	87.7914	262.2476	53.7811	-0.0349	0.9994	-0.0000	-0.08773	-0.08104	-0.17969	-0.09741
463.9692	88.1802	262.6618	68.4833	-0.0349	0.9994	-0.0000	-0.08287	-0.07200	-0.17487	-0.08742
476.8466	88.6297	262.9967	83.2465	-0.0349	0.9994	-0.0000	-0.08078	-0.06478	-0.17595	-0.07769
491.1094	89.1277	263.2098	99.2697	-0.0349	0.9994	-0.0000	-0.07889	-0.05776	-0.17867	-0.06694
506.1701	89.5535	263.2792	116.937	-0.0349	0.9994	-0.0000	-0.08384	-0.05677	-0.19681	-0.05958
521.3108	90.1820	263.1944	136.9212	-0.0349	0.9994	-0.0000	-0.09312	-0.05982	-0.21893	-0.05527
534.0322	90.6261	263.0128	159.8496	-0.0349	0.9994	-0.0000	-0.09929	-0.05042	-0.23141	-0.05093
405.5012	86.1378	257.1634	0.0517	-0.0352	0.9994	-0.0003	-0.17018	-0.19420	-0.27184	-0.23597
406.0034	86.1556	257.5017	0.1730	-0.0353	0.9994	-0.0001	-0.16390	-0.18606	-0.26177	-0.23552
406.5610	86.1754	257.8612	0.3240	-0.0354	0.9994	-0.0002	-0.15776	-0.17755	-0.25677	-0.23225
407.1868	86.1975	258.2410	0.5152	-0.0354	0.9994	-0.0002	-0.15376	-0.17245	-0.25213	-0.21501
407.8996	86.2227	258.6429	0.7622	-0.0354	0.9994	-0.0002	-0.14976	-0.17030	-0.24784	-0.21041
408.7139	86.2513	259.0695	1.0715	-0.0352	0.9994	-0.0002	-0.14591	-0.16414	-0.24392	-0.20151
409.6486	86.2842	259.5200	1.4720	-0.0351	0.9994	-0.0002	-0.14215	-0.15808	-0.23998	-0.19249
410.7462	86.3227	259.9987	1.9420	-0.0350	0.9994	-0.0002	-0.13843	-0.15211	-0.23620	-0.18338
412.0503	86.3683	260.5148	2.3761	-0.0350	0.9994	-0.0002	-0.13459	-0.14607	-0.23211	-0.17407
413.6164	86.4231	261.0716	2.8449	-0.0350	0.9994	-0.0002	-0.13071	-0.14011	-0.22800	-0.16482
415.5311	86.4900	261.6791	3.3496	-0.0349	0.9994	-0.0002	-0.12660	-0.13407	-0.22338	-0.15558
417.9029	86.5727	262.3443	3.9499	-0.0349	0.9994	-0.0002	-0.12223	-0.12797	-0.21829	-0.14659
420.8771	86.6764	263.0708	4.5934	-0.0349	0.9994	-0.0001	-0.11753	-0.12171	-0.21249	-0.13798
424.6411	86.8077	263.8656	5.3360	-0.0349	0.9994	-0.0001	-0.11240	-0.11518	-0.20580	-0.12998
429.4218	86.9744	264.7280	6.1293	-0.0349	0.9994	-0.0001	-0.10678	-0.10810	-0.19810	-0.12254
435.4778	87.1857	265.6427	6.9397	-0.0349	0.9994	-0.0001	-0.10098	-0.10038	-0.18993	-0.11556
443.0734	87.4507	266.5818	7.9752	-0.0349	0.9994	-0.0000	-0.09501	-0.09167	-0.18143	-0.10800
452.4275	87.7771	267.4977	9.2570	-0.0349	0.9994	-0.0000	-0.08985	-0.08282	-0.17447	-0.09973
463.6386	88.1685	268.3276	10.760	-0.0349	0.9994	-0.0000	-0.08554	-0.07384	-0.16942	-0.08988
476.6013	88.6211	269.1967	12.4247	-0.0349	0.9994	-0.0000	-0.08399	-0.06690	-0.16424	-0.08054
490.9555	89.1223	269.4247	14.4607	-0.0349	0.9994	-0.0000	-0.08294	-0.06061	-0.17302	-0.07049
506.1069	89.6513	269.5623	16.9839	-0.0349	0.9994	-0.0000	-0.08704	-0.05911	-0.21567	-0.06135
521.3337	90.1828	269.3873	19.8429	-0.0349	0.9994	-0.0000	-0.08615	-0.04019	-0.23597	-0.02954
534.0642	90.6273	269.0244	22.9779	-0.0349	0.9994	-0.0001	-0.17029	-0.19421	-0.27066	-0.23437
405.4552										

434.7197	87.1589	269.9642	30.6616	-0.0349	0.9994	0.0001	-0.10255	-0.10244	-0.18472	-0.11832
442.3747	87.4260	271.3729	41.8966	-0.0349	0.9994	0.0001	-0.09692	-0.09387	-0.17585	-0.11085
451.8145	87.7555	272.7477	55.4547	-0.0349	0.9994	0.0000	-0.09218	-0.08507	-0.16857	-0.10261
463.1374	88.1509	273.9931	70.2128	-0.0349	0.9994	0.0000	-0.08831	-0.07614	-0.16340	-0.09278
476.2347	88.6082	274.9964	83.9550	-0.0349	0.9994	0.0000	-0.08721	-0.06941	-0.16445	-0.08350
490.7405	89.1148	275.6395	93.9094	-0.0349	0.9994	0.0000	-0.08689	-0.06352	-0.16724	-0.07344
506.0407	89.6490	275.8452	97.5373	-0.0349	0.9994	0.0000	-0.09149	-0.06298	-0.18719	-0.06806
521.4035	90.1852	275.5797	94.2896	-0.0349	0.9994	0.0000	-0.10275	-0.06970	-0.21322	-0.06773
534.1325	90.6296	275.0354	61.6825	-0.0349	0.9994	0.0000	-0.08491	-0.05694	-0.23955	-0.05382
405.3967	86.1341	257.3239	0.0618	-0.0357	0.9994	0.0002	-0.17147	-0.19734	-0.27438	-0.24167
405.6904	86.1445	257.9944	0.2079	-0.0356	0.9994	0.0001	-0.16615	-0.19375	-0.26584	-0.24270
406.0431	86.1569	258.7074	0.3890	-0.0354	0.9994	0.0001	-0.16130	-0.18740	-0.26080	-0.23645
406.4735	86.1720	259.4609	0.6161	-0.0354	0.9994	0.0002	-0.15744	-0.18108	-0.25575	-0.22837
407.0026	86.1907	260.2578	0.9046	-0.0354	0.9994	0.0002	-0.15356	-0.17497	-0.25078	-0.22028
407.6427	86.2131	261.1060	1.2603	-0.0352	0.9994	0.0002	-0.14970	-0.16872	-0.24593	-0.21158
408.4174	86.2402	262.0025	1.7139	-0.0352	0.9994	0.0002	-0.14585	-0.16244	-0.24099	-0.20243
409.3716	86.2747	262.9573	2.3489	-0.0352	0.9994	0.0002	-0.14192	-0.15609	-0.23610	-0.19274
410.5461	86.3147	263.9877	3.1629	-0.0351	0.9994	0.0002	-0.13786	-0.14970	-0.23086	-0.18270
411.9991	86.3655	265.1003	4.3075	-0.0350	0.9994	0.0002	-0.13376	-0.14345	-0.22564	-0.17261
413.8197	86.4290	266.3142	5.9139	-0.0350	0.9994	0.0002	-0.12938	-0.13717	-0.21978	-0.16249
416.1196	86.5093	267.6436	8.1797	-0.0349	0.9994	0.0002	-0.12491	-0.13112	-0.21366	-0.15287
419.0502	86.6116	269.0988	11.1937	-0.0349	0.9994	0.0002	-0.12016	-0.12510	-0.20677	-0.14389
422.8038	86.7428	270.6908	16.0274	-0.0349	0.9994	0.0001	-0.11513	-0.11899	-0.19907	-0.13585
427.6148	86.9105	272.4176	22.4702	-0.0349	0.9994	0.0001	-0.10979	-0.11236	-0.19038	-0.12856
433.7496	87.1246	274.3507	31.2146	-0.0349	0.9994	0.0001	-0.10448	-0.10499	-0.18130	-0.12170
441.4796	87.3945	276.1342	42.5548	-0.0349	0.9994	0.0001	-0.09926	-0.09644	-0.17191	-0.11417
451.0289	87.7279	277.9744	56.2458	-0.0349	0.9994	0.0000	-0.09506	-0.08761	-0.16408	-0.10588
462.4972	88.1283	279.6429	71.1795	-0.0349	0.9994	0.0000	-0.09187	-0.07885	-0.15851	-0.09629
475.7744	88.5920	280.9878	85.1289	-0.0349	0.9994	0.0000	-0.09155	-0.07263	-0.15910	-0.08776
490.4889	89.1060	281.8517	95.2640	-0.0349	0.9994	0.0000	-0.09230	-0.06759	-0.16165	-0.07877
506.0044	89.6478	282.1277	98.8436	-0.0349	0.9994	0.0000	-0.09921	-0.06923	-0.18150	-0.07592
521.5632	90.1907	281.7696	95.4577	-0.0349	0.9994	0.0000	-0.11381	-0.07818	-0.20778	-0.07708
534.2579	90.6340	281.0444	60.2108	-0.0349	0.9994	0.0000	-0.11710	-0.08647	-0.23176	-0.08295
405.3229	86.1315	257.3783	0.0675	-0.0351	0.9994	0.0001	-0.17275	-0.19643	-0.27278	-0.23668
405.4676	86.1365	258.1643	0.2248	-0.0354	0.9994	0.0000	-0.16809	-0.19516	-0.26418	-0.24174
405.6719	86.1437	259.0080	0.4176	-0.0354	0.9994	0.0001	-0.16378	-0.19076	-0.25861	-0.23994
405.9593	86.1538	259.9097	0.6548	-0.0353	0.9994	0.0001	-0.16011	-0.18522	-0.25391	-0.23433
406.3521	86.1676	260.8734	0.9509	-0.0353	0.9994	0.0001	-0.15633	-0.17929	-0.24888	-0.22740
406.8627	86.1854	261.9077	1.3219	-0.0352	0.9994	0.0002	-0.15243	-0.17305	-0.24402	-0.21941
407.5208	86.2084	263.0128	1.7915	-0.0352	0.9994	0.0002	-0.14851	-0.16660	-0.23907	-0.21049
408.3716	86.2382	264.1997	2.4367	-0.0352	0.9994	0.0002	-0.14442	-0.15993	-0.23404	-0.20058
409.4536	86.2760	265.4866	3.2730	-0.0352	0.9994	0.0002	-0.14017	-0.15318	-0.22863	-0.19008
410.8288	86.3240	266.8829	4.4431	-0.0351	0.9994	0.0002	-0.13591	-0.14662	-0.22322	-0.17937
412.5870	86.3854	268.4110	6.0860	-0.0350	0.9994	0.0003	-0.13138	-0.14011	-0.21713	-0.16858
414.8422	86.4641	270.0881	8.4033	-0.0350	0.9994	0.0003	-0.12675	-0.13392	-0.21072	-0.15830
417.7480	86.5656	271.9263	11.7087	-0.0350	0.9994	0.0002	-0.12192	-0.12795	-0.20350	-0.14887
421.4990	86.6966	273.9388	16.4135	-0.0349	0.9994	0.0001	-0.11691	-0.12204	-0.19647	-0.14058
426.3346	86.8654	276.1213	22.9944	-0.0349	0.9994	0.0001	-0.11166	-0.11563	-0.18638	-0.13311
432.5270	87.0816	278.4391	31.9220	-0.0349	0.9994	0.0001	-0.10651	-0.10839	-0.17680	-0.12598
440.3537	87.3549	280.8211	43.4906	-0.0349	0.9994	0.0001	-0.10160	-0.09985	-0.16693	-0.11810
450.0435	87.6932	283.1493	57.4384	-0.0349	0.9994	0.0001	-0.09774	-0.09092	-0.15854	-0.10944
461.5994	88.1002	285.2615	72.6288	-0.0349	0.9994	0.0001	-0.09496	-0.08205	-0.15261	-0.09938
475.2107	88.5721	286.9646	86.8003	-0.0349	0.9994	0.0000	-0.09520	-0.07580	-0.15290	-0.09009
490.1962	89.0959	288.0598	97.0632	-0.0350	0.9994	0.0000	-0.09685	-0.07114	-0.15610	-0.08066
506.0009	89.6477	288.4095	100.6786	-0.0348	0.9994	0.0000	-0.10701	-0.07533	-0.17641	-0.07994
521.8204	90.1996	287.9566	96.9473	-0.0349	0.9994	0.0000	-0.12356	-0.08520	-0.20405	-0.08225
534.4435	90.6404	287.0508	58.0400	-0.0349	0.9994	0.0000	-0.14943	-0.10901	-0.22896	-0.10347

## plate top lower

X	Y	Z	AREA	EX	EY	EZ	CP1	CP2	CP3	CP4
385.4524	85.2660	218.4233	10.8484	-0.1120	0.9935	-0.0214	-0.67068	-0.64131	-1.33783	-0.71599
387.9487	85.4748	217.5253	14.5773	-0.0654	0.9978	-0.0077	-0.65509	-0.70792	-1.39553	-0.77086
390.5687	85.6124	215.6262	14.1114	-0.0437	0.9990	-0.0005	-0.64399	-0.77962	-1.13912	-0.84031
392.9273	85.7020	213.6277	12.1756	-0.0314	0.9994	0.0000	-0.63296	-0.81824	-1.36810	-0.88140
395.0069	85.7712	211.9167	9.7669	-0.0349	0.9994	0.0000	-0.61930	-0.81711	-1.64931	-0.88294
396.7636	85.8325	210.5567	7.5156	-0.0349	0.9994	0.0000	-0.60183	-0.79112	-1.53422	-0.87722
398.1743	85.8813	209.5564	5.6264	-0.0349	0.9994	0.0000	-0.58520	-0.77104	-1.63532	-0.85495
399.2605	85.9197	208.8713	4.1966	-0.0349	0.9994	0.0000	-0.56950	-0.75281	-1.57259	-0.80080
400.0878	85.9486	208.4507	3.2316	-0.0349	0.9994	0.0000	-0.55979	-0.74272	-1.51627	-0.78709
400.7429	85.9715	207.8708	2.7637	-0.0349	0.9994	0.0000	-0.55312	-0.73921	-1.50143	-0.78183
401.3625	85.9931	207.5156	2.1957	-0.0349	0.9994	0.0000	-0.54557	-0.73340	-1.47482	-0.77363
402.0344	86.0166	207.1102	3.5321	-0.0349	0.9994	0.0000	-0.53828	-0.72809	-1.46732	-0.76459
402.7381	86.0419	206.6658	3.8404	-0.0349	0.9994	0.0000	-0.53091	-0.72386	-1.45606	-0.75573
403.5425	86.0693	206.1859	4.1635	-0.0349	0.9994	0.0000	-0.52287	-0.72024	-1.45239	-0.74634
404.4025	86.0993	205.6688	4.5456	-0.0349	0.9994	0.0000	-0.51424	-0.71722	-1.44746	-0.73648
405.3569	86.1326	205.1070	5.0018	-0.0349	0.9994	0.0000	-0.50403	-0.71343	-1.44431	-0.72500
406.4351	86.1702	204.4905	5.6270	-0.0349	0.9994	0.0000	-0.49224	-0.70890	-1.44104	-0.71170
407.6730	86.2135	203.8072	6.3884	-0.0349	0.9994	0.0000	-0.47723	-0.70126	-1.43549	-0.69494
409.1180	86.2640	203.0440	7.4161	-0.0349	0.9994	0.0000	-0.45881	-0.69221	-1.42969	-0.67430
410.8364	86.3239	202.2029	8.7364	-0.0349	0.9994	0.0000	-0.43781	-0.68266	-1.41384	-0.64186
412.9066	86.3962	201.3059	10.3691	-0.0349	0.9994	0.0000	-0.41479	-0.67238	-1.39442	-0.59853
415.4433	86.4849	200.4060	12.5100	-0.0349	0.9994	0.0000	-0.38939	-0.66138	-1.34839	-0.53171
418.6268	86.5960	199.5855	15.3642	-0.0349	0.9994	0.0000	-0.29958	-0.64844	-1.29896	-0.45408
422.6586	86.7368	198.7908	18.7908	-0.0349	0.9994	0.0000	-0.23011	-0.63301	-1.19170	-0.34486
427.7556	86.9148	198.0495	24.0468	-0.0349	0.9994	0.0000	-0.16841	-0.61352	-1.09262	-0.24633
434.1573	87.1384	198.8539	31.5173	-0.0349	0.9994	0.0000	-0.12673	-0.59228	-1.04218	-0.18131
442.0292	87.4133	198.7780	35.5702	-0.0349	0.9994	0.0000	-0.10123	-0.57352	-1.01893	-0.13694
451.4201	87.7412	198.7052	38.6268	-0.0349	0.9994	0.0000	-0.08406	-0.55805	-1.00315	-0.10359
462.2226	88.1188	198.6361	40.1719	-0.0349	0.9994	0.0000	-0.07300	-0.54118	-0.99097	-0.07760
474.1660	88.5355	198.5742	39.8987	-0.0349	0.9994	0.0000	-0.06215	-0.52639	-0.96253	-0.05837
486.1186	88.9738	198.5226	37.7375	-0.0349	0.9994	0.0000	-0.05590	-0.51362	-0.93387	-0.05274
499.2782	89.4124	198.4740	22.5367	-0.0349	0.9994	0.0000	-0.06542	-0.49547	-0.91470	-0.05943
509.5161	89.7699	198.3243	17.0009	-0.0349	0.9994	0.0000	-0.05399	-0.47757	-0.91473	-0.05955
382.1948	84.9457	222.9766	15.0442	-0.0716	0.9974	-0.0241	-0.46764	-0.62855	-0.94246	-0.69956
385.7672	85.3333	222.9098	12.9914	-0.0432	0.9991	-0.0028	-0.44966	-0.71077	-0.94246	-0.73407
389.5832	85.5641	220.9878	11.3881	-0.0348	0.9994	-0.0001	-0.46602	-0.73993	-0.86549	-0.73404
392.7303	85.6921	218.5794	9.3685	-0.0347	0.9994	-0.0001	-0.43388	-0.73993	-0.74234	-0.76639
395.2001	85.7781	216.4664	7.3759	-0.0349	0.9994	0.0000	-0.41023	-0.69205	-0.74234	-0.71742
397.1268	85.8452	214.8546	5.7198	-0.0349	0.9994	0.0000	-0.40334	-0.63190	-0.77248	-0.67500
398.6124	85.8971	213.7552	4.5204	-0.0349	0.9994	0.0000	-0.39345	-0.61701	-0.77750	-0.64870
399.7561	85.9370	212.7497	3.8576	-0.0349	0.9994	0.0000	-0.38112	-0.60650	-0.73051	-0.63403
400.6717	85.9690	212.7497	3.3876	-0.0349	0.9994	0.0000	-0.36859	-0.59884	-0.71893	-0.62344
401.4359	85.9957	212.0264	2.8219	-0.0349	0.9994	0.0000	-0.35708	-0.58956	-0.69628	-0.61066
402.1857	86.0219	211.5544	2.3876	-0.0349	0.9994	0.0000	-0.34570	-0.57955	-0.68615	-0.59639
403.0221	86.0483	211.0130	2.0264	-0.0349	0.9994	0.0000	-0.33397	-0.56889	-0.67469	-0.58123
403.8425	86.0743	210.4281	1.7198	-0.0349	0.9994	0.0000	-0.32126	-0.55619	-0.66619	-0.56630
404.6502	86.1002	209.8114	1.4544	-0.0349	0.9994	0.0000	-0.30771	-0.54167	-0.65553	-0.54441
405.4595	86.1268	209.1626	1.2008	-0.0349	0.9994	0.0000	-0.29271	-0.52378	-0.64566	-0.52148
406.2709	86.1532	208.4754	1.0016	-0.0349	0.9994	0.0000	-0.27698	-0.50345	-0.63593	-0.49449
407.0833	86.1796	207.7407	0.8406	-0.0349	0.9994	0.0000	-0.25954	-0.47793	-0.62469	-0.46420
407.8903	86.2058	206.9488	0.7143	-0.0349	0.9994	0.0000	-0.24184	-0.44593	-0.61149	-0.42863
408.6933	86.2318	206.1008	0.6112	-0.0349	0.9994	0.0000	-0.22184	-0.41133	-0.60129	-0.38779
409.4963	86.2574	205.2123	0.5204	-0.0349	0.9994	0.0000	-0.20099	-0.37017	-0.58933	-0.34437
410.2993	86.2828	204.3198	0.4365	-0.0349	0.9994	0.0000	-0.17672	-0.31868	-0.56275	-0.29509
411.1023	86.3080	203.4274	0.3591	-0.0349	0.9994	0.0000	-0.15212	-0.26774	-0.53931	-0.24661
411.9053	86.3333	202.5349	0.2874	-0.0349	0.9994	0.0000	-0.12411	-0.20802	-0.48742	-0.19584
412.7083	86.3586	201.6424	0.2219	-0.0349	0.9994	0.0000	-0.10108	-0.15691	-0.44445	-0.15726
413.5113	86.3839	200.7500	0.1612	-0.0349	0.9994	0.0000	-0.08648	-0.12479	-0.43081	-0.12928
414.3143	86.4092	200.8575	0.1057	-0.0349	0.9994	0.0000	-0.07801	-0.10317	-0.43337	-0.10706
415.1173	86.4345	200.9650	0.0557	-0.0349	0.9994	0.0000	-0.07148	-0.08618	-0.43907	-0.08724
415.9203	86.4598	201.0725	0.0100	-0.0349	0.9994	0.0000	-0.06585	-0.07308	-0.44369	-0.06891
416.7233	86.4851	201.1800	0.0000	-0.0349	0.9994	0.0000	-0.06085	-0.06367	-0.44305	-0.05485
417.5263	86.5104	201.2875	0.0000	-0.0349	0.9994	0.0000	-0.05689	-0.05692	-0.43005	-0.05310
418.3293	86.5357	201.3950	0.0000	-0.0349	0.9994	0.0000	-0.05397	-0.05397	-0.43005	-0.05310
419.1323	86.5610	201.5025	0.0000	-0.0349	0.9994	0.0000	-0.05105	-0.05105	-0.43005	-0.05310
420.9353	86.5863	201.6100	0.0000	-0.0349	0.9994	0.0000	-0.04813	-0.04813	-0.43005	-0.05310
421.7383	86.6116	201.7175	0.0000	-0.0349	0.9994	0.0000	-0.04521	-0.04521	-0.43005	-0.05310
422.5413	86.6369	201.8250	0.0000	-0.0349	0.9994	0.0000	-0.04229	-0.04229	-0.43005	-0.05310
423.3443	86.6622	201.9325	0.0000	-0.0349	0.9994	0.0000	-0.03937	-0.03937	-0.43005	-0.05310
424.1473	86.6875	202.0400	0.0000	-0.0349	0.9994	0.0000	-0.03645	-0.03645	-0.43005	-0.05310
424.9503	86.7128	202.1475	0.0000	-0.0349	0.9994	0.0000	-0.03353	-0.03353	-0.43005	-0.05310
425.7533	86.7381	202.2550	0.0000	-0.0349	0.9994	0.0000	-0.03061	-0.03061	-0.43005	-0.05310
426.5563	86.7634	202.3625	0.0000	-0.0349	0.9994	0.0000	-0.02769	-0.02769	-0.43005	-0.05310
427.3593	86.7887	202.4700	0.0000	-0.0349	0.9994	0.0000	-0.02477	-0.02477	-0.43005	-0.05310
428.1623	86.8140	202.5775	0.0000	-0.0349	0.9994	0.0000	-0.02185	-0.02185	-0.43005	-0.05310
428.9653	86.8393	202.6850	0.0000	-0.0349	0.9994	0.0000	-0.01893	-0.01893	-0.43005	-0.05310
429.7683	86.8646	202.7925	0.0000	-0.0349	0.9994	0.0000	-0.01601	-0.01601	-0.43005	-0.05310
430.5713	86.8899	202.9000	0.0000	-0.0349	0.9994	0.0000	-0.01309	-0.01309	-0.43005	-0.05310
431.3743	86.9152	203.0075	0.0000	-0.0349	0.9994	0.0000	-0.01017	-0.01017	-0.43005	-0.05310
432.1773	86.9405	203.1150	0.0000	-0.0349	0.9994	0.0000	-0.00725	-0.00725	-0.43005	-0.05310
432.9803	86.9658	203.2225	0.0000	-0.0349	0.9994	0.0000	-0.00433	-0.00433	-0.43005	-0.05310
433.7833	86.9911	203.3300	0.0000	-0.0349	0.9994	0.0000	-0.00141	-0.00141	-0.43005	-0.05310
434.5863	87.0164	203.4375	0.0000	-0.0349	0.9994	0.0000	0.0000	0.0000	-0.43005	-0.05310
435.3893	87.0417	203.5450	0.0000	-0.0349	0.9994	0.0000	0.0000	0.0000	-0.43005	-0.05310
436.1923	87.0670	203.6525	0.0000	-0.0349	0.9994	0.0000	0.0000	0.0000	-0.43005	-0.05310
436.9953	87.0923	203.7600	0.0000	-0.0349	0.9994	0.0000	0.0000	0.0000	-0.43005	-0.05310
437.7983	87.1176	203.8675	0.0000	-0.0349	0.9994	0.0000	0.0000	0.0000	-0.43005	-0.05310
438.6013	87.1429	203.9750	0.0000	-0.0349	0.9994	0.0000	0.0000	0.0000	-0.43005	-0.05310
439.4043	87.1682	204.0825	0.0000	-0.0349	0.9994	0.0000	0.0000	0.0000	-0.43005	-0.05310
440.2073	87.1935	204.1900	0.0000	-0.0349	0.9994	0.0000	0.0000	0.0000	-0.43005	-0.05310
441.0103	87.2188	204.2975	0.0000	-0.0349	0.9994	0.0000	0.000			

384.8201	85.2022	230.9397	19.5916	-0.0789	0.9968	0.0125	-0.43514	-0.56227	-0.72367	-0.61994
389.1773	85.5158	229.0251	16.7678	-0.0556	0.9984	0.0042	-0.40120	-0.58368	-0.55442	-0.65520
392.6346	85.6861	226.9718	13.5107	-0.0376	0.9993	0.0002	-0.37008	-0.57579	-0.60168	-0.67215
395.1932	85.7786	225.2881	10.4788	-0.0341	0.9994	-0.0001	-0.33090	-0.57196	-0.55687	-0.63400
397.0351	85.8420	224.1615	8.0385	-0.0349	0.9994	0.0000	-0.30719	-0.46395	-0.55870	-0.55649
398.3769	85.8889	223.5408	6.3652	-0.0348	0.9994	0.0000	-0.29559	-0.43845	-0.53834	-0.50480
399.4200	85.9253	223.3119	5.5828	-0.0349	0.9994	0.0000	-0.28119	-0.41936	-0.52320	-0.47700
400.2954	85.9558	223.2752	4.8430	-0.0349	0.9994	0.0000	-0.26937	-0.40203	-0.50026	-0.45466
401.2334	85.9886	223.1111	4.0514	-0.0349	0.9994	0.0000	-0.25905	-0.38760	-0.48471	-0.43624
402.3904	86.0290	222.6473	3.7527	-0.0349	0.9994	0.0000	-0.24894	-0.37297	-0.47224	-0.41610
403.6948	86.0746	221.9215	3.0903	-0.0349	0.9994	0.0000	-0.24035	-0.36045	-0.46544	-0.39829
405.0905	86.1233	221.0214	2.7185	-0.0349	0.9994	0.0000	-0.23264	-0.34953	-0.46088	-0.38288
406.5445	86.1741	220.0329	2.2576	-0.0349	0.9994	0.0000	-0.22547	-0.34013	-0.45782	-0.36889
408.0463	86.2265	219.0150	1.7327	-0.0349	0.9994	0.0000	-0.21847	-0.33093	-0.45522	-0.35590
409.6059	86.2810	217.9964	1.2523	-0.0349	0.9994	0.0000	-0.21113	-0.32193	-0.45174	-0.34287
411.2486	86.3384	216.9845	0.7646	-0.0349	0.9994	0.0000	-0.20324	-0.31128	-0.44821	-0.32950
413.0135	86.3989	215.9751	0.2371	-0.0349	0.9994	0.0000	-0.19419	-0.29964	-0.44257	-0.31484
414.9548	86.4678	214.9589	0.9383	-0.0349	0.9994	0.0000	-0.18411	-0.28685	-0.43716	-0.29866
417.1426	86.5442	213.9294	0.9128	-0.0349	0.9994	0.0000	-0.17244	-0.27083	-0.42850	-0.27922
419.6745	86.6326	212.8867	11.2542	-0.0349	0.9994	0.0000	-0.15950	-0.25166	-0.42017	-0.25667
422.6956	86.7381	211.8409	13.0924	-0.0349	0.9994	0.0000	-0.14427	-0.22678	-0.40545	-0.22888
426.4070	86.8677	210.8173	15.4660	-0.0349	0.9994	0.0000	-0.12791	-0.19706	-0.39055	-0.19839
431.0947	87.0314	209.8768	18.4318	-0.0349	0.9994	0.0000	-0.10974	-0.16217	-0.36726	-0.16445
437.1359	87.2423	209.0438	21.9338	-0.0349	0.9994	0.0000	-0.09308	-0.12668	-0.34452	-0.13478
444.8678	87.5124	208.2681	25.3588	-0.0349	0.9994	0.0000	-0.08126	-0.10130	-0.33656	-0.11331
454.4257	87.8461	207.5327	27.9873	-0.0349	0.9994	0.0000	-0.07397	-0.08674	-0.34320	-0.09637
465.6722	88.2389	206.8744	29.4017	-0.0349	0.9994	0.0000	-0.06828	-0.07559	-0.35373	-0.08042
478.2038	88.6766	206.3405	29.6110	-0.0349	0.9994	0.0000	-0.06367	-0.06610	-0.36162	-0.06505
491.4069	89.1377	205.9578	28.8272	-0.0349	0.9994	0.0000	-0.05933	-0.05829	-0.35309	-0.05263
504.4754	89.5940	205.7090	27.2753	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
515.8988	89.9928	205.6393	23.1208	-0.0349	0.9994	0.0000	-0.07553	-0.06611	-0.36162	-0.06108
527.3293	90.4485	205.9664	21.0304	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
537.6905	90.9444	205.5582	23.3436	-0.0349	0.9994	0.0000	-0.07553	-0.06611	-0.36162	-0.06108
548.6907	91.4744	205.8912	25.8517	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
559.6907	92.0393	205.9743	28.8272	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
570.6907	92.6381	205.7810	31.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
581.6907	93.2715	205.3630	34.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
592.6907	93.9403	204.8405	37.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
603.6907	94.6485	204.3130	40.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
614.6907	95.3915	203.7810	43.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
625.6907	96.1741	203.2436	46.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
636.6907	96.9928	202.7090	49.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
647.6907	97.8461	202.1753	52.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
658.6907	98.7389	201.6405	55.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
669.6907	99.6766	201.1058	58.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
680.6907	100.6605	200.5710	61.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
691.6907	101.6954	200.0363	64.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
702.6907	102.7795	199.5015	67.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
713.6907	103.9118	198.9667	70.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
724.6907	105.0954	198.4318	73.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
735.6907	106.3381	197.8969	76.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
746.6907	107.6403	197.3620	79.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
757.6907	109.0039	196.8271	82.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
768.6907	110.4285	196.2922	85.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
779.6907	111.9144	195.7573	88.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
790.6907	113.4615	195.2224	91.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
801.6907	115.0697	194.6875	94.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
812.6907	116.7389	194.1526	97.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
823.6907	118.4697	193.6177	100.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
834.6907	120.2620	193.0828	103.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
845.6907	122.1161	192.5479	106.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
856.6907	124.0318	192.0130	109.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
867.6907	126.0085	191.4781	112.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
878.6907	128.0462	190.9432	115.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
889.6907	130.1444	190.4083	118.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
900.6907	132.3039	189.8734	121.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
911.6907	134.5250	189.3385	124.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
922.6907	136.8085	188.8036	127.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
933.6907	139.1544	188.2687	130.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
944.6907	141.5626	187.7338	133.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
955.6907	144.0339	187.1989	136.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
966.6907	146.5685	186.6640	139.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
977.6907	149.1677	186.1291	142.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
988.6907	151.8318	185.5942	145.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
999.6907	154.5615	185.0593	148.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443
1000.6907	157.3566	184.5244	151.7810	-0.0349	0.9994	0.0000	-0.07190	-0.06444	-0.35717	-0.05443

398	7496	85	9019	242	4131	4	6507	-0.0349	0.9994	0.0000	-0.23937	-0	35493	-0	36206	-0	45084
399	5586	85	9302	241	9051	5	2308	-0.0349	0.9994	0.0000	-0.23122	-0	34058	-0	35198	-0	42870
400	5685	85	9619	241	0084	5	6587	-0.0349	0.9994	0.0000	-0.22186	-0	32399	-0	34908	-0	40319
401	5065	85	9982	239	7638	6	0485	-0.0349	0.9994	0.0000	-0.21344	-0	30908	-0	34460	-0	37920
402	7077	86	0401	238	2590	6	4351	-0.0349	0.9994	0.0000	-0.20505	-0	29479	-0	34301	-0	35624
404	0929	86	0885	236	5930	6	8313	-0.0349	0.9994	0.0000	-0.19672	-0	28070	-0	33977	-0	33383
405	6664	86	1434	234	8515	7	2427	-0.0349	0.9994	0.0000	-0.18867	-0	26711	-0	33740	-0	31235
407	4253	86	2048	233	0928	7	6864	-0.0349	0.9994	0.0000	-0.18067	-0	25380	-0	33523	-0	29257
409	3699	86	2727	231	3489	8	1786	-0.0349	0.9994	0.0000	-0.17292	-0	24094	-0	33333	-0	27595
411	5108	86	3475	229	6343	8	7657	-0.0349	0.9994	0.0000	-0.16526	-0	22823	-0	33123	-0	25993
413	8760	86	4301	227	9498	9	4932	-0.0349	0.9994	0.0000	-0.15760	-0	21573	-0	32933	-0	24312
416	5155	86	5222	226	2892	10	4293	-0.0349	0.9994	0.0000	-0.14962	-0	20271	-0	32740	-0	22697
419	5120	86	6269	224	6420	11	6755	-0.0349	0.9994	0.0000	-0.14121	-0	18902	-0	32556	-0	21095
422	9989	86	7187	222	9962	12	3762	-0.0349	0.9994	0.0000	-0.13195	-0	17390	-0	32333	-0	19495
427	1804	86	8947	221	3436	13	6666	-0.0349	0.9994	0.0000	-0.12180	-0	15725	-0	32112	-0	17895
432	3562	87	0754	219	6921	14	6504	-0.0349	0.9994	0.0000	-0.11056	-0	13944	-0	31880	-0	16295
438	9264	87	3049	218	0548	15	2106	-0.0349	0.9994	0.0000	-0.09884	-0	12172	-0	31644	-0	14695
447	2832	87	5967	216	4475	16	7305	-0.0349	0.9994	0.0000	-0.08773	-0	10592	-0	31410	-0	13095
457	6146	87	9975	214	9320	17	4005	-0.0349	0.9994	0.0000	-0.07839	-0	09201	-0	31173	-0	11495
469	7917	88	3828	213	6316	18	8599	-0.0349	0.9994	0.0000	-0.07065	-0	07895	-0	30933	-0	09895
483	3934	88	8580	212	6340	19	2917	-0.0349	0.9994	0.0000	-0.06463	-0	06719	-0	30699	-0	08295
493	7481	88	9513	211	0525	20	0083	-0.0349	0.9994	0.0000	-0.06002	-0	05772	-0	30466	-0	06695
511	8402	89	8213	211	9760	21	4610	-0.0349	0.9994	0.0000	-0.07047	-0	06107	-0	30233	-0	05095
523	4554	90	2581	212	6063	22	9658	-0.0349	0.9994	0.0000	-0.05725	-0	04952	-0	29999	-0	03495
533	5554	91	5644	209	1384	23	1412	-0.0397	0.9495	0.0508	-0.05886	-0	02823	-0	29766	-0	01895
538	6554	91	3126	249	5196	24	9262	-0.2187	0.9757	0.0161	-0.24961	-0	02519	-0	29533	-0	00295
539	4886	94	3889	249	3704	14	6801	-0.1460	0.9893	-0.0008	-0.38962	-0	02519	-0	29300	-0	00095
585	2232	95	1071	248	9810	15	1740	-0.1006	0.9949	-0.0053	-0.40010	-0	02519	-0	29066	-0	00095
590	0774	95	5289	248	5828	13	7907	-0.0691	0.9976	-0.0009	-0.37875	-0	02519	-0	28833	-0	00095
593	6950	95	7269	248	3100	11	0842	-0.0339	0.9994	-0.0001	-0.33523	-0	02519	-0	28600	-0	00095
596	1698	95	8118	248	1547	8	2018	-0.0349	0.9994	0.0000	-0.25591	-0	02519	-0	28366	-0	00095
597	8287	95	8698	248	0306	6	0888	-0.0350	0.9994	0.0000	-0.24979	-0	02519	-0	28133	-0	00095
599	0415	95	9121	247	8540	5	1833	-0.0348	0.9994	0.0000	-0.23309	-0	02519	-0	27900	-0	00095
599	8944	95	9419	247	5140	3	4797	-0.0350	0.9994	0.0000	-0.23309	-0	02519	-0	27666	-0	00095
600	5056	95	9632	246	8934	3	6309	-0.0348	0.9994	0.0000	-0.21760	-0	02519	-0	27433	-0	00095
601	1213	95	9847	245	9547	3	8885	-0.0349	0.9994	0.0000	-0.21099	-0	02519	-0	27200	-0	00095
601	8167	96	0090	244	7268	4	2633	-0.0349	0.9994	0.0000	-0.20530	-0	02519	-0	26966	-0	00095
602	6626	96	0386	243	2641	4	7249	-0.0349	0.9994	0.0000	-0.19920	-0	02519	-0	26733	-0	00095
603	7084	96	0751	241	6316	4	2551	-0.0349	0.9994	0.0000	-0.19269	-0	02519	-0	26500	-0	00095
604	9812	96	1195	239	8927	4	8389	-0.0349	0.9994	0.0000	-0.18576	-0	02519	-0	26266	-0	00095
606	4946	96	1723	238	0927	4	4846	-0.0349	0.9994	0.0000	-0.17856	-0	02519	-0	26033	-0	00095
608	2597	96	2339	236	2603	3	2039	-0.0349	0.9994	0.0000	-0.17112	-0	02519	-0	25800	-0	00095
610	2950	96	3050	234	4107	3	0450	-0.0349	0.9994	0.0000	-0.16349	-0	02519	-0	25566	-0	00095
612	6337	96	3687	232	5185	3	0448	-0.0349	0.9994	0.0000	-0.15563	-0	02519	-0	25333	-0	00095
615	3289	96	4808	230	6725	3	2684	-0.0349	0.9994	0.0000	-0.14736	-0	02519	-0	25100	-0	00095
618	4638	96	5803	228	7781	10	7988	-0.0349	0.9994	0.0000	-0.13851	-0	02519	-0	24866	-0	00095
623	6577	96	7197	226	8597	13	7651	-0.0349	0.9994	0.0000	-0.12863	-0	02519	-0	24633	-0	00095
626	1589	97	8758	224	9150	13	2820	-0.0349	0.9994	0.0000	-0.11757	-0	02519	-0	24400	-0	00095
632	1072	97	0685	222	9547	19	4245	-0.0349	0.9994	0.0000	-0.10516	-0	02519	-0	24166	-0	00095
639	1589	97	3112	221	0005	23	0434	-0.0349	0.9994	0.0000	-0.09219	-0	02519	-0	23933	-0	00095
647	8505	97	6165	219	0879	26	5626	-0.0349	0.9994	0.0000	-0.08054	-0	02519	-0	23700	-0	00095
648	5691	97	9908	217	3038	29	2697	-0.0349	0.9994	0.0000	-0.07182	-0	02519	-0	23466	-0	00095
649	1462	98	4301	215	7862	30	8756	-0.0349	0.9994	0.0000	-0.06557	-0	02519	-0	23233	-0	00095
649	1791	98	9204	214	6763	31	5638	-0.0349	0.9994	0.0000	-0.06107	-0	02519	-0	23000	-0	00095
650	0001	98	4380	214	0828	31	5551	-0.0349	0.9994	0.0000	-0.05934	-0	02519	-0	22766	-0	00095
654	5510	99	9459	214	1359	29	7891	-0.0349	0.9994	0.0000	-0.05395	-0	02519	-0	22533	-0	00095
656	1881	90	3522	214	9827	18	5540	-0.0349	0.9994	0.0000	-0.04718	-0	02519	-0	22300	-0	00095
668	1234	91	7307	211	3523	10	9079	-0.0349	0.9994	0.0000	-0.03644	-0	02519	-0	22066	-0	00095
673	2854	93	2203	211	6697	12	1617	-0.0349	0.9994	0.0000	-0.02398	-0	02519	-0	21833	-0	00095
679	2591	93	1387	211	6693	13	0993	-0.0349	0.9994	0.0000	-0.01181	-0	02519	-0	21600	-0	00095
685	3098	95	5694	211	5450	13	0993	-0.0349	0.9994	0.0000	-0.01181	-0	02519	-0	21366	-0	00095
690	6352	95	5694	211	4610	13	3944	-0.0349	0.9994	0.0000	-0.00029	-0	02519	-0	21133	-0	00095
694	7626	95	7638	211	7482	6	5556	-0.0349	0.9994	0.0000	-0.00029	-0	02519	-0	20900	-0	00095
699	6406	95	9288	211	6396	4	5076	-0.0349	0.9994	0.0000	-0.00029	-0	02519	-0	20666	-0	00095
700	5188	95	9733	211	6396	3	7694	-0.0349	0.9994	0.0000	-0.00029	-0	02519	-0	20433	-0	00095
701	5009	95	0001	211	5224	3	7694	-0.0349	0.9994	0.0000	-0.00029	-0	02519	-0	20200	-0	00095
701	9623	96	0141	210	5823	2	2920	-0.0349	0.9994	0.0000	-0.00029	-0	02519	-0	19966	-0	00095
702	3087	96	0262	209	6809	2	4422	-0.0349	0.9994	0.0000	-0.00029	-0	02519	-0	19733	-0	00095
702	7014	96	0399	208	5598	2	7654	-0.0349	0.9994	0.0000	-0.00029	-0	02519	-0	19500	-0	00095
703	2221	96	0581	207	2437	3	2097	-0.0349	0.9994	0.0000	-0.00029	-0	02519	-0	19266	-0	00095
703	9308	96	0828	206	7651	3	7517	-0.0349	0.9994	0.0000	-0.00029	-0	02519	-0	19033	-0	00095
704	8696	96	1156	204	1623	4	3740	-0.0349	0.9994	0.0000	-0.00029	-0	02519	-0	18800	-0	00095
706	0676	96	1574	202	4646	4	0876	-0.0349	0.9994	0.0000	-0.00029	-0	02519	-0	18566	-0	00095
707	5509	96	2092	200	6868	5	9052	-0.0349	0.9994	0.0000	-0.00029	-0	02519	-0	18333	-0	00095
709	3543	96	2722	200	8385	6	8928	-0.0349	0.9994	0.0000	-0.00029	-0	02519	-0	18100	-0	00095
711	5292	96	3481	200	9190	6	5948	-0.0349	0.9994</								

406.2876	86.1651	245.8997	4.0062	-0.0349	0.9994	0.0000	-0.17118	-0.22528	-0.29174	-0.27429
407.5122	86.2079	244.2611	4.7974	-0.0349	0.9994	0.0000	-0.16610	-0.21768	-0.29057	-0.26136
409.0685	86.2622	242.5150	5.7875	-0.0349	0.9994	0.0000	-0.16021	-0.20843	-0.28879	-0.24649
411.0269	86.3306	240.6510	7.0295	-0.0349	0.9994	0.0000	-0.15353	-0.19765	-0.28670	-0.23003
413.4819	86.4163	238.6578	8.6272	-0.0349	0.9994	0.0000	-0.14600	-0.18534	-0.28388	-0.21230
416.5617	86.5239	236.5255	10.6771	-0.0349	0.9994	0.0000	-0.13754	-0.17151	-0.28038	-0.19371
420.4374	86.6592	234.2493	13.3146	-0.0349	0.9994	0.0000	-0.12786	-0.15602	-0.27603	-0.17449
425.3265	86.8300	231.8417	16.5780	-0.0349	0.9994	0.0000	-0.11687	-0.13873	-0.27003	-0.15487
431.4881	87.0451	229.3380	20.4040	-0.0349	0.9994	0.0000	-0.10457	-0.11995	-0.26254	-0.13506
439.2125	87.3149	226.8047	24.5559	-0.0349	0.9994	0.0000	-0.09184	-0.10088	-0.25585	-0.11590
448.7622	87.6484	224.3394	29.6277	-0.0349	0.9994	0.0000	-0.08044	-0.08409	-0.25120	-0.09903
460.2676	88.0502	222.0891	35.2047	-0.0349	0.9994	0.0000	-0.07160	-0.07117	-0.25260	-0.08411
473.6295	88.5168	220.2405	42.0137	-0.0349	0.9994	0.0000	-0.06530	-0.06114	-0.26002	-0.06992
488.4785	89.0357	218.9775	50.9829	-0.0349	0.9994	0.0000	-0.06073	-0.05252	-0.26690	-0.05610
504.1596	89.5833	218.4517	62.8988	-0.0349	0.9994	0.0000	-0.06138	-0.04838	-0.27018	-0.04817
519.6584	90.1242	218.7879	77.9941	-0.0349	0.9994	0.0000	-0.07420	-0.05431	-0.29419	-0.04924
531.4355	90.5354	219.9119	95.0849	-0.0349	0.9994	0.0000	-0.09403	-0.07289	-0.25359	-0.06360
567.8432	81.6496	255.8415	10.9461	-0.3560	0.9337	-0.0108	0.23515	0.17114	-0.20576	0.03744
572.9255	83.2187	255.8890	13.0605	-0.2433	0.9697	-0.0211	0.21291	0.21537	-0.43800	-0.30910
579.0689	84.4315	255.9123	14.2609	-0.1487	0.9887	-0.0200	0.39880	-0.47124	-0.49619	-0.52875
585.5711	85.2161	255.9283	13.7163	-0.0901	0.9959	-0.0113	0.40696	-0.56589	-0.45078	-0.62692
591.5752	85.6286	255.9595	11.3328	-0.0433	0.9991	-0.0033	0.36439	-0.60050	-0.42398	-0.68670
596.4664	85.8225	256.0278	7.9745	-0.0347	0.9994	0.0004	0.26563	-0.46181	-0.34393	-0.62723
600.0421	85.9470	256.1273	4.8951	-0.0349	0.9994	0.0000	0.20331	-0.26961	-0.30566	-0.42718
602.4377	86.0307	256.2031	2.8861	-0.0349	0.9994	0.0000	0.19428	-0.24307	-0.29662	-0.29402
603.9690	86.0842	256.1925	2.0029	-0.0349	0.9994	0.0000	0.18051	-0.21790	-0.28225	-0.28351
604.6308	86.1073	255.8042	1.1344	-0.0349	0.9994	0.0000	0.17752	-0.21497	-0.28287	-0.26704
604.7483	86.1114	255.0403	1.1218	-0.0349	0.9994	0.0000	0.17596	-0.21577	-0.27711	-0.27235
604.8681	86.1156	254.1696	1.2874	-0.0349	0.9994	0.0000	0.17423	-0.21565	-0.27775	-0.27189
605.0491	86.1219	253.1976	1.5852	-0.0348	0.9994	0.0000	0.17309	-0.21612	-0.27705	-0.27167
605.3367	86.1319	252.1282	1.9685	-0.0349	0.9994	0.0000	0.17158	-0.21589	-0.27753	-0.27016
605.7609	86.1467	250.9567	2.4169	-0.0349	0.9994	0.0000	0.16973	-0.21486	-0.27803	-0.26699
606.3605	86.1677	249.6859	2.9339	-0.0349	0.9994	0.0000	0.16725	-0.21248	-0.27846	-0.26166
607.1782	86.1962	248.3125	3.5493	-0.0349	0.9994	0.0000	0.16403	-0.20852	-0.27858	-0.25400
608.2507	86.2337	246.8238	4.2505	-0.0349	0.9994	0.0000	0.16017	-0.20319	-0.27855	-0.24443
609.6390	86.2822	245.2127	5.1471	-0.0349	0.9994	0.0000	0.15556	-0.19628	-0.27804	-0.23288
611.4276	86.3446	243.4601	6.2897	-0.0349	0.9994	0.0000	0.15022	-0.18788	-0.27726	-0.21960
613.7262	86.4248	241.5493	7.7822	-0.0349	0.9994	0.0000	0.14397	-0.17780	-0.27581	-0.20463
616.6812	86.5280	239.4648	9.7351	-0.0349	0.9994	0.0000	0.13674	-0.16604	-0.27356	-0.18337
620.4837	86.6608	237.1968	12.3032	-0.0349	0.9994	0.0000	0.12828	-0.15247	-0.27044	-0.17113
625.3721	86.8316	234.7553	15.5846	-0.0349	0.9994	0.0000	0.11840	-0.13694	-0.26596	-0.15327
631.6144	87.0435	232.1764	19.6123	-0.0349	0.9994	0.0000	0.10704	-0.11975	-0.26009	-0.13513
639.4891	87.3245	229.5380	24.3025	-0.0349	0.9994	0.0000	0.09505	-0.10218	-0.25540	-0.11755
649.2307	87.6647	226.9615	29.4123	-0.0349	0.9994	0.0000	0.08415	-0.08690	-0.25318	-0.10198
660.9488	88.0739	224.6212	34.5760	-0.0349	0.9994	0.0000	0.07545	-0.07510	-0.25649	-0.08763
674.5375	88.5485	222.7259	39.3070	-0.0349	0.9994	0.0000	0.06907	-0.06551	-0.26533	-0.07322
689.6174	89.0756	221.4780	43.0957	-0.0350	0.9994	0.0000	0.06397	-0.05633	-0.27269	-0.05867
705.5287	89.6312	221.0391	45.2895	-0.0348	0.9994	0.0000	0.06390	-0.05117	-0.27587	-0.04958
721.3676	90.1838	221.4954	44.2677	-0.0349	0.9994	0.0000	0.07528	-0.05601	-0.29127	-0.04967
733.6021	90.6110	222.5693	22.2800	-0.0349	0.9994	0.0000	0.06424	-0.05007	-0.23223	-0.03942